Welcome to STN International! Enter x:x

LOGINID:SSPTAKAB1626

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * *	* *	* *	* *	* Welcome to STN International * * * * * * * * * * *
NEWS	1			Web Page for STN Seminar Schedule - N. America
NEWS	2	JAN	02	STN pricing information for 2008 now available
NEWS	3	JAN	16	CAS patent coverage enhanced to include exemplified prophetic substances
NEWS	4	JAN	28	USPATFULL, USPAT2, and USPATOLD enhanced with new custom IPC display formats
NEWS	5	JAN	28	MARPAT searching enhanced
NEWS	6	JAN	28	USGENE now provides USPTO sequence data within 3 days of publication
NEWS	7	JAN	28	TOXCENTER enhanced with reloaded MEDLINE segment
NEWS	8	JAN	28	MEDLINE and LMEDLINE reloaded with enhancements
NEWS	9	FEB	08	STN Express, Version 8.3, now available
NEWS	10	FEB	20	PCI now available as a replacement to DPCI
NEWS	11	FEB	25	IFIREF reloaded with enhancements
NEWS				IMSPRODUCT reloaded with enhancements
NEWS	13	FEB	29	WPINDEX/WPIDS/WPIX enhanced with ECLA and current
				U.S. National Patent Classification
NEWS	14	MAR	31	IFICDB, IFIPAT, and IFIUDB enhanced with new custom
				IPC display formats
NEWS	15	MAR	31	CAS REGISTRY enhanced with additional experimental
				spectra
NEWS	16	MAR	31	CA/CAplus and CASREACT patent number format for U.S.
				applications updated
NEWS		MAR		LPCI now available as a replacement to LDPCI
NEWS				EMBASE, EMBAL, and LEMBASE reloaded with enhancements
NEWS				STN AnaVist, Version 1, to be discontinued
NEWS	20	APR	15	WPIDS, WPINDEX, and WPIX enhanced with new
NEWS	2.2	3 DD	20	predefined hit display formats EMBASE Controlled Term thesaurus enhanced
NEWS		APR		IMSRESEARCH reloaded with enhancements
NEWS		MAY		INPAFAMDB now available on STN for patent family
MEMO	23	PLAT	30	searching
NEWS	2.4	MAY	3.0	DGENE, PCTGEN, and USGENE enhanced with new homology
				sequence search option
NEWS	25	JUN	06	EPFULL enhanced with 260,000 English abstracts
NEWS	26	JUN	06	KOREAPAT updated with 41,000 documents
NEWS	27	JUN	13	USPATFULL and USPAT2 updated with 11-character
				patent numbers for U.S. applications
NEWS	28	JUN	19	CAS REGISTRY includes selected substances from
				web-based collections
NEWS	29	JUN	25	CA/CAplus and USPAT databases updated with IPC
				reclassification data
NEWS	30	JUN	30	AEROSPACE enhanced with more than 1 million U.S.

patent records

NEWS 31 JUN 30 EMBASE, EMBAL, and LEMBASE updated with additional options to display authors and affiliated organizations

NEWS 32 JUN 30 STN on the Web enhanced with new STN AnaVist Assistant and BLAST plug-in

NEWS 33 JUN 30 STN AnaVist enhanced with database content from EPFULL

NEWS EXPRESS JUNE 27 08 CURRENT WINDOWS VERSION IS V8.3.

AND CURRENT DISCOVER FILE IS DATED 23 JUNE 2008.

NEWS HOURS STN Operating Hours Plus Help Desk Availability

NEWS LOGIN Welcome Banner and News Items

NEWS IPC8 For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

* * * * * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 07:55:38 ON 10 JUL 2008

=> file req

COST IN U.S. DOLLARS SINCE FILE TOTAL. ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 07:55:49 ON 10 JUL 2008 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2008 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 9 JUL 2008 HIGHEST RN 1033322-45-0 DICTIONARY FILE UPDATES: 9 JUL 2008 HIGHEST RN 1033322-45-0

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

Uploading C:\Program Files\STNEXP\Queries\10538145_no8ring.str

```
9 10 19 20 ring nodes:
1 2 3 4 5 6 11 12 13 14 15 16 chain bonds:
3 -9 6-14 6-19 9-10 19-20 ring bonds:
1-2 1-6 2-3 3-4 4-5 5-6 11-12 11-16 12-13 13-14 14-15 15-16 exact/norm bonds:
1-2 1-6 2-3 3-4 3-9 4-5 5-6 6-14 6-19 9-10 19-20 normalized bonds:
11-12 11-16 12-13 13-14 14-15 15-16 isolated ring systems:
1-2 1-6 2-3 3-4 3-9 4-5 5-6 6-14 6-19 9-10 19-20 normalized bonds:
11-12 11-16 12-13 13-14 14-15 15-16 isolated ring systems:
```

G1:C,O

chain nodes :

G2:C, N

Match level: 1:Atom 2:Atom 4:Atom 5:Atom 6:Atom 9:CLASS 10:CLASS 11:Atom 12:Atom 13:Atom 15:Atom 16:Atom 19:CLASS 20:CLASS

L1 STRUCTURE UPLOADED

=> d L1 L1 HAS NO ANSWERS L1 STR

Structure attributes must be viewed using STN Express query preparation.

=> file caplus COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.46 0.67

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 07:56:09 ON 10 JUL 2008 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 10 Jul 2008 VOL 149 ISS 2 FILE LAST UPDATED: 9 Jul 2008 (20080709/ED)

Caplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2008.

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

http://www.cas.org/legal/infopolicy.html

=> s L1 SSS full

REGISTRY INITIATED

Substance data SEARCH and crossover from CAS REGISTRY in progress... Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

FULL SEARCH INITIATED 07:56:13 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 1829831 TO ITERATE

54.6% PROCESSED 1000000 ITERATIONS INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED) SEARCH TIME: 00.00.06 121 ANSWERS

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**
BATCH **INCOMPLETE**
PROJECTED ITERATIONS: 1829831 TO 1829831
PROJECTED ANSWERS: 177 TO 265

L2 121 SEA SSS FUL L1

L3 17 L2

=> d ibib abs hitstr 1-YOU HAVE REQUESTED DATA FROM 17 ANSWERS - CONTINUE? Y/(N):y

L3 ANSWER 1 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2008:337087 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 148:393742

TITLE: Identification of 4-(4-Aminopiperidin-1-yl)-7Hpyrrolo[2,3-d]pyrimidines as Selective Inhibitors of

Protein Kinase B through Fragment Elaboration
AUTHOR(S): Caldwell, John J.; Davies, Thomas G.; Donald,

Alastair; McHardy, Tatiana; Rowlands, Martin G.; Aherne, G. Wynne; Hunter, Lisa K.; Taylor, Kevin; Ruddle, Ruth; Raynaud, Florence I.; Verdonk, Marcel; Workman, Paul; Garrett, Michelle D.; Collins, Ian

CORPORATE SOURCE: Cancer Research UK Centre for Cancer Therapeutics, The Institute of Cancer Research, Sutton, Surrey, SM2 5NG,

UK

SOURCE: Journal of Medicinal Chemistry (2008), 51(7),

2147-2157 CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

LANGUAGE: English
AB Fragment-based screening identified 7-azaindole as a protein kinase B inhibitor scaffold. Fragment elaboration using iterative crystallog, of inhibitor-PRA-PRB chimera complexes efficiently guided improvements in the potency and selectivity of the compds., resulting in the identification of nanomolar 6-(piperidin-1-yl)purine, 4-(piperidin-1-yl)-7-azaindole, and 4-(piperidin-1-yl)pyrrolo[2,3-d]pyrimidine inhibitors of PKEB with antiproliferative activity and showing pathway inhibition in cells. A divergence in the binding mode was seen between 4-aminomethylpiperidine and 4-aminopiperidine containing mols. Selectivity for PKB vs PKA was observed with 4-aminopiperidically different bound conformations between PKA and PKA-PKB

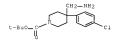
chimera. IT 669068-16-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(piperidinyl pyrrolopyrimidines as protein kinase B inhibitors)

RN 669068-16-0 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(aminomethyl)-4-(4-chlorophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)



REFERENCE COUNT: 63 THERE ARE 63 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 2 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2007:1275232 CAPLUS Full-text

DOCUMENT NUMBER: 147:522261

TITLE: Preparation of purine and related analogues as ROCK kinase or protein kinase P70S6K inhibitors

INVENTOR(S): Davies, Thomas Glanmor; Garrett, Michelle Dawn; Boyle, Robert George; Collins, Ian

PATENT ASSIGNEE(S): Astex Therapeutics Limited, UK; The Institute of

Cancer Research Royal Cancer Hospital; Cancer Research

Technology Limited
SOURCE: PCT Int. Appl., 212pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

| | ENT | | | | KIN | | DATE | | APPL | | | | | | | | | |
|------|------------|-------------|-----|-----|----------------------|-----|--------------|-----|----------------|------|------|------|------------|-----|------------|------|-----|--|
| | 2007 | | | | A2 | | 2007 | | | WO 2 | 007- | | | | | 0070 | | |
| | 2007 | | | | A3 | | 2007 | | | | | 0010 | | | _ | 00.0 | | |
| | W: | ΑE, | AG, | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BH, | BR, | BW, | BY, | BZ, | CA, | |
| | | CH, | CN, | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | EG, | ES, | FI, | GB, | |
| | | GD, | GE, | GH, | GM, | GT, | HN, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | KM, | |
| | | KN, KP, | | KR, | KZ, | LA, | LC, | LK, | LR, | LS, | LT, | LU, | LY, | MA, | MD, | MG, | MK | |
| | | MN, MW, | | MX, | MY, | MZ, | NA, | NG, | NI, | NO, | NZ, | OM, | PG, | PH, | PL, | PT, | RO | |
| | | RS, RU, | | SC, | SD, | SE, | SG, | SK, | SL, | SM, | SV, | SY, | TJ, | TM, | TN, | TR, | TT | |
| | | TZ, | UA, | UG, | US, UZ, | | VC, | VN, | ZA, | ZM, | ZW | | | | | | | |
| | RW: | AT, | BE, | BG, | CH, | CY, | CZ, | DE, | DK, | EE, | ES, | FI, | FR, | GB, | GR, | HU, | ΙE | |
| | | IS, | IT, | LT, | LU, | LV, | MC, | MT, | NL, | PL, | PT, | RO, | SE, | SI, | SK, | TR, | BF | |
| | | ВJ, | CF, | CG, | CI, | CM, | GA, | GN, | GQ, | GW, | ML, | MR, | NE, | SN, | TD, | TG, | BW | |
| | | GH, | GM, | KE, | LS, | MW, | MZ, | NA, | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW, | AM, | ΑZ | |
| | BY, KG, KZ | | | | Z, MD, RU, TJ, TM, A | | | | AP, EA, EP, OA | | | | | | | | | |
| RITY | APP | PLN. INFO.: | | | | | GB 2006-8176 | | | | | | A 20060425 | | | | | |
| | | | | | | | | | | GB 2 | 006- | 8179 | | | A 20060425 | | | |

OTHER SOURCE(S): MARPAT 147:522261

PRI OTH GI

AB Title compds. I [T = N or CR5; J1-J2 = N=C(R6), (R7)C=N, (R8)N-C(O), (R8)2C-C(O), N=N or (R7)C=C(R6); E = 5- to 6-membered monocyclic carbocyclic or heterocyclic group; Q1 = bond or (un)substituted saturated hydrocarbon linker. one of the C atoms being optionally be replaced by O or N, or an adjacent pair of C atoms may be replaced by CONH, NHCO, etc.; Q2 = bond or (un)substituted saturated hydrocarbon linker, wherein one of the C atoms may optionally be replaced by O or N; G = H, NR2R3, OH or SH with the proviso that when E = aryl or heteroaryl and Q2 = bond, then G = H; R1 = H, aryl or heteroaryl, with the proviso that when R1 = H and G = NR2R3, then Q2 = bond; R2 and R3 independently = H, (un)substituted hydrocarbyl, acyl, etc.; R4, R6 and R8 independently = H, halo, saturated hydrocarbyl, CN, CONH2, CF3, NH2, etc.; R5 and R7 independently = H, halo, saturated hydrocarbyl, CN, or CF3], and their pharmaceutically acceptable salts, solvates, tautomers or N-oxides thereof, are prepared and disclosed as ROCK kinase or protein kinase P70S6K inhibitors. Thus, e.g., II was prepared by condensation reaction of 4-fluoro-1-(triisopropylsilanyl)-1H-pyrrolo[2,3- b]pyridine with [[4-(4chlorophenyl)piperidin-4-yl]methyl]amine followed by deprotection. Many compds. of the invention showed antiproliferative activity in Alamar Blue assay and were found to have IC50 values of < 25 µM. II exhibited inhibitory activity against ROCK-II and P70S6K with IC50 values of < 0.01 µM and 0.03 µM, resp. I should prove useful for the treatment or prophylaxis of a disease or condition in which the modulation (e.g. inhibition) of ROCK kinase or protein kinase P70S6K.

IT 669068-16-0P, 4-Aminomethyl-4-(4-chlorophenyl)piperidine-1-

carboxylic acid tert-butyl ester 835500-47-0P,

 $4-(4-Chloropheny1)-4-[\,(methylamino)\,methyl]piperidine-1-carboxylic\ acid\ tert-butyl\ ester$

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of purine and related analogs as ROCK kinase or protein kinase P70S6K inhibitor)

RN 669068-16-0 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(aminomethyl)-4-(4-chlorophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

L3 ANSWER 3 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2007:439604 CAPLUS Full-text

DOCUMENT NUMBER: 146:421851

TITLE: Preparation of piperidine derivatives as antagonists

of CCR1 receptor

Zhang, Penglie; Pennell, Andrew M. K.; Chen, Wei; INVENTOR(S): Greenman, Kevin Lloyd; Li, Lianfa; Sullivan, Edward J.

PATENT ASSIGNEE(S): Chemocentryx, Inc., USA SOURCE: PCT Int. Appl., 86pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

GI

| PATENT NO. | KII | ND DAT | ΓE | API | PLICAT: | | DATE | | |
|--------------------|----------|----------|---------|--------|---------|---------|----------|------------|--|
| | | | | | | | | | |
| WO 2007044804 | A: | 2 200 | 070419 | WO | 2006-0 | JS39713 | | 20061011 | |
| W: AE, A | , AL, AM | , AT, AU | J, AZ, | BA, B | B, BG, | BR, BW, | BY, B | Z, CA, CH, | |
| CN, C | , CR, CU | , CZ, DE | E, DK, | DM, D | Z, EC, | EE, EG, | ES, F | I, GB, GD, | |
| | | | | | | | | M, KN, KP, | |
| KR, K | , LA, LC | , LK, LF | R, LS, | LT, LU | J, LV, | LY, MA, | MD, M | G, MK, MN, | |
| MW, M | , MY, MZ | , NA, NO | G, NI, | NO, N | z, om, | PG, PH, | PL, P | T, RO, RS, | |
| RU, S | , SD, SE | , SG, SF | K, SL, | SM, ST | J, SY, | TJ, TM, | TN, T | R, TT, TZ, | |
| UA, U | , US, UZ | , VC, VN | N, ZA, | ZM, ZV | Ñ | | | | |
| | | | | | | | | R, HU, IE, | |
| IS, I | , LT, LU | , LV, MC | C, NL, | PL, P | r, RO, | SE, SI, | SK, T | R, BF, BJ, | |
| | | | | | | | | G, BW, GH, | |
| | | | | SL, S | z, Tz, | UG, ZM, | ZW, A | M, AZ, BY, | |
| KG, K | , MD, RU | , TJ, TM | 4 | | | | | | |
| US 2007008803 | A: | | | | 2006-5 | | 20061011 | | |
| US 2007009346 | A: | 1 200 | 070426 | US | 2006- | 580202 | | 20061011 | |
| PRIORITY APPLN. IN | | | | | 2005- | 725980P | P | 20051011 | |
| OTHER SOURCE(S): | MAI | RPAT 146 | 5:42185 | 51 | | | | | |

- AB Title compds. I [R1 = cycloalkyl, (un)substituted alkyl, haloalkyl, etc.; and two R1 attached to the same or different carbon atoms may join toogether to form a 3- to 7-membered ring; m = 0-4; R2-6 independently = H, halo, CN, NO2, etc.; A = H, aryl, heteroaryl, etc.; B = (un)substituted aryl or heteroaryl; L1 = (un)substituted alkylene or heteroalkylene], and their pharmaceutically acceptable salts, are prepared and disclosed as antagonists of CCR1 receptor. Thus, e.g., II was prepared via heterocyclization of 4-chlorobenzyl cyanide with bis(2-chloroethyl)amine followed by acylation with (4-chloro-5-methyl-3-trifluoromethylpyrazol-1-yl)acetic acid. Select compds. were evaluated for their inhibitory activity in CCR1 ligand binding assay or chemotaxis assay, e.g., II demonstrated ICSO value of < 1000 nM.
- IT 934347-52-1P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

- (preparation of piperidine derivs. as antagonists of CCR1 receptor) ${\tt RN} = 934347-52-1 {\tt CAPLUS}$
- CN Ethanone, 1-[4-(aminomethyl)-4-(4-chlorophenyl)-1-piperidinyl]-2-[4-chloro-5-methyl-3-(trifluoromethyl)-1H-pyrazol-1-yl]- (CA INDEX NAME)

L3 ANSWER 4 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2007:11886 CAPLUS Full-text

DOCUMENT NUMBER:

146:121827
Piperidine derivatives useful as histamine H3

INVENTOR(S):

antagonists and their preparation, pharmaceutical compositions and use in the treatment of diseases Aslanian, Robert G.; Berlin, Michael Y.; Boyce, Christopher W.; Chao, Jianhua; De Lera Ruiz, Manuel; Mangiaracina, Pietro; McCormick, Kevin D.; Mutahi, Mwangi W.; Rosenblum, Stuart B.; Shih, Neng-Yang; Solomon, Daniel M.; Tom, Wing C.; Vaccaro, Henry A.;

Zheng, Junying; Zhu, Xiaohong

PATENT ASSIGNEE(S): Schering Corporation, USA PCT Int. Appl., 119pp.

CODEN: PIXXD2 Patent English

LANGUAGE: FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

DOCUMENT TYPE:

SOURCE:

| | | ENT 1 | | | | | | DATE | | | APPL | | | | | DATE | | | |
|---------|-----|--------|------|--------|-----|------------------|-----|------|-----------------|------------------|-------|------|------|----------|----------|-------|------|------|--|
| | | 2007 | | | | | | | | | | | | | | | 0060 | 619 | |
| | | W: | AE, | AG, | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BR, | BW, | BY, | BZ, | CA, | CH, | |
| | | | CN, | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | EG, | ES, | FI, | GB, | GD, | |
| | | | GE. | GH. | GM. | HR. | HU. | ID, | IL. | IN. | IS. | JP. | KE. | KG. | KM. | KN. | KP. | KR. | |
| | | | | | | | | LS, | | | | | | | | | | | |
| | | | | | | | | NO. | | | | | | | | | | | |
| | | | | | | | | SM, | | | | | | | | | | | |
| | | | | | | ZA, | | | | | , | | , | | | , | , | | |
| | | RW: | | | | | | CZ, | DE. | DK. | EE. | ES. | FI. | FR. | GB. | GR. | HU. | IE. | |
| | | | | | | | | MC. | | | | | | | | | | | |
| | | | | | | | | GN. | | | | | | | | | | | |
| | | | | | | | | NA. | | | | | | | | | | | |
| | | | | | | RU. | | | , | , | , | , | , | , | , | , | , | , | |
| | ΑIJ | 20062 | | | | | | | 0104 | | AII 2 | 006- | | 2 | 0.060 | 619 | | | |
| | | 26109 | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | 20060619 | | | | | |
| | | 19020 | | | | | | | | | | | | | | | | | |
| | | | | | | | | CZ, | | | | | | | | | | | |
| | | | | | | | | LV, | | | | | | | | | | | |
| | | | | | | | 20, | 2., | 1107 | 1127 | , | , | 1107 | 00, | 01, | D.1.7 | 111/ | 112, | |
| | мv | 20081 | | | | K, YU 20000310 | | | | 8 MX 2008-115 | | | | | 20071219 | | | | |
| | | | | | | | | | | 6 KR 2007-730855 | | | | | | | 0071 | | |
| | | APPI | | | | | | | US 2005-692110P | | | | | | _ | | | | |
| . 1(101 | | · rill | DI4. | 1141 0 | • • | | | | | | WO 2 | | | | | | | | |
| THER | S | URCE | (S): | | | MARPAT 146:12182 | | | | | no 2 | 000- | 0023 | 000 | | . 2 | 0000 | 017 | |
| 2 T | | | | | | MARCHI 140.1210 | | | | | | | | | | | | | |

AB Disclosed are novel compds. of the formula I or a pharmaceutically acceptable salt thereof; compns. and methods of treating allergy-induced airway responses, congestions, obesity, metabolic syndrome, alc. fatty liver disease, hepatic steatosis, nonalcoholic steatohepatitis, cirrhosis, hepatacellular carcinoma and cognitive deficit disorders, using said compds., alone or in combination with other agents. Compds. of formula I wherein M1 and M3 are

independently CH and N; M2 is CH, CF and N; Y is CO, CS, C1-5 alkyl, C-NOH and derivs., and SO1-2; X is NH and derivs., aminoalkyl, alkylamino, , C0-3 alkyl, etc.; Z is bond, (un)substituted C1-6 alkvl, (un)substituted alkoxy, (un) substituted alkylamino, etc.; R1 is H, (un) substituted alkyl, (un) substituted (hetero) cycloalkyl, (un) substituted (hetero) aryl, etc.; R2 is (un) substituted alkyl, (un) substituted alkenyl, (un) substituted (hetero) aryl, and (un)substituted (hetero)cycloalkyl; R3 is H, alkyl, (un)substituted (hetero)arvl, (un)substituted (hetero)cycloalkyl, and CONH2; R5 and R6 are independently halo, alkyl, OH, alkoxy, haloalkyl, CN, etc.; a and b are independently 0, 1 and 2; n and p are independently 1, 2 and 3; and their pharmaceutically acceptable salts thereof, are claimed. Example compound II was prepared by etherification of N-Boc-piperidin-4-ol with 3.5dichlorophenol; the resulting N-Boc-4-(3,5-dichlorophenoxy) underwent hydrolysis to give 4-(3,5-dichlorophenoxy)piperidine, which underwent amidation with N-[2-(tert-butoxycarbonylamino)pyridin-4-ylmethyl]piperidine-4carboxylic acid lithium salt; the resulting amide underwent hydrolysis to give compound II. All the invention compds. were evaluated for their histamine antagonistic activity (data given).

IT 918532-07-7P 918532-53-3P 918533-86-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of piperidine derivs. as histamine H3
antagonists useful in treatment of diseases)

RN 918532-07-7 CAPLUS

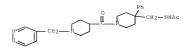
CN Acetamide, N-[[1-[[5-[(dimethylamino)methyl]-2-furanyl]methyl]-4-piperidinyl]carbonyl]-4-phenyl-4-piperidinyl]methyl]- (CA INDEX NAME)

RN 918532-53-3 CAPLUS

CN Acetamide, N-[[4-phenyl-1-[[1-(4-pyridinylmethyl)-4-piperidinyl]carbonyl]4-piperidinyl]methyl]- (CA INDEX NAME)

RN 918533-86-5 CAPLUS

CN Acetamide, N-[[4-phenyl-1-[[1-(4-pyridazinylmethyl)-4piperidinyl]carbonyl]-4-piperidinyl]methyl]- (CA INDEX NAME)



REFERENCE COUNT: THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 5 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN 2006:625275 CAPLUS Full-text ACCESSION NUMBER:

DOCUMENT NUMBER: 145:249070

TITLE: Preparation of 2,3-dihydro-1H-spiro[isoquinoline-4,4'piperidine] via an N-sulfonyl Pictet-Spengler reaction Liu, Jian; Jian, Tianying; Sebhat, Iyassu; Nargund,

AUTHOR(S): Ravi

CORPORATE SOURCE: Department of Medicinal Chemistry, Merck Research

Laboratories, Rahway, NJ, 07065, USA

SOURCE: Tetrahedron Letters (2006), 47(29), 5115-5117

CODEN: TELEAY; ISSN: 0040-4039 Elsevier B.V.

PUBLISHER: DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 145:249070

A high yielding synthesis of variously substituted 2,3-dihydro-1H-AB

spiro[isoquinoline-4,4'-piperidine] is reported. N-(2- nitrophenyl)sulfonyl was successfully used as both an activating and protecting group for the key Pictet-Spengler reaction.

TТ 906369-58-2P 906369-59-3P 906369-60-6P 906369-61-7P 906369-62-8P 906369-63-9P 906369-64-0P 906369-80-0P 906369-81-1P 906369-82-2P

> RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of dihydro-spiro[isoquinoline-piperidine] by Pictet-Spengler reaction using N-(nitrophenyl)sulfonyl activating and protecting group)

RN 906369-58-2 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(4-methylphenyl)-4-

[[(methylsulfonyl)amino]methyl]-, ethyl ester (CA INDEX NAME)

906369-59-3 CAPLUS RN

1-Piperidinecarboxylic acid, 4-(4-fluorophenyl)-4-[[(methylsulfonyl)amino]methyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 906369-60-6 CAPLUS

CN

1-Piperidinecarboxylic acid, 4-(4-chlorophenyl)-4[[(methylsulfonyl)amino]methyl]-, phenylmethyl ester (CA INDEX NAME)

RN 906369-61-7 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(4-methoxyphenyl)-4[[(methylsulfonyl)amino]methyl]-, ethyl ester (CA INDEX NAME)

RN 906369-62-8 CAPLUS

CN

1-Piperidinecarboxylic acid, 4-(3,4-difluorophenyl)-4[[(methylsulfonyl)amino]methyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

$$\begin{picture}(20,0) \put(0,0){\line(1,0){100}} \put(0,0){\line(1,0){100$$

RN 906369-63-9 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(3,4-dimethylphenyl)-4-[[(methylsulfonyl)amino]methyl]-, phenylmethyl ester (CA INDEX NAME)

RN 906369-64-0 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(4-chloro-3-methylphenyl)-4[[(methylsulfonyl)amino]methyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 906369-80-0 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[(2-nitrophenyl)sulfonyl]amino]methyl]-4phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

$$\bigcup_{NO_2}\bigcup_{0}^{0} NH_CH_2 - \bigcup_{Ph} \bigcup_{0}^{0} OBu-t$$

RN 906369-81-1 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(4-methylphenyl)-4-[[(2-nitrophenyl)sulfonyl]amino]methyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 906369-82-2 CAPLUS

CN

1-Piperidinecarboxylic acid, 4-(4-chloro-3-methylphenyl)-4-[[[(2-nitrophenyl)sulfonyl]amino]methyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 6 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2006:465188 CAPLUS Full-text

DOCUMENT NUMBER: 144:488667

TITLE: Pharmaceutical compounds such as quinazolinones and their preparation, and use for treatment of protein

kinase A and/or B mediated diseases
INVENTOR(S): Berdini, Valerio; Boyle, Robert George; Saxty, Gordon;

Verdonk, Marinus Leendert; Woodhead, Steven John; Wyatt, Paul Graham; Sore, Hannah Fiona; Walker, David

Winter; Caldwell, John; Collins, Ian

PATENT ASSIGNEE(S): Astex Therapeutics Limited, UK; The Institute of Cancer ResearchRoyal Cancer Hospital; Cancer Research

Technology Limited

SOURCE: PCT Int. Appl., 178 pp.

CODEN: PIXXD2 Patent

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

| PAT | PATENT NO.
 | | | | | D | DATE | | | APPL | ICAT | ION I | .00 | | D | ATE | |
|-----|--------------------------------|------|-----|-----|------|-----|------|------|-----|------|-------|-------|----------|-----|-----|-----|-----|
| | WO 2006051290
WO 2006051290 | | | | - | | | | | | | | | | | | |
| WO | 2006 | 0512 | 90 | | A2 | | 2006 | 0518 | | WO 2 | 005-0 | | 20051109 | | | | |
| WO | 2006 | 0512 | 90 | | A3 | | 2006 | 0914 | | | | | | | | | |
| | W: AE, AG, AL | | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BR, | BW, | BY, | BZ, | CA, | CH, | |
| | | CN. | CO. | CR. | CII. | CZ. | DE. | DK. | DM. | DZ. | EC. | EE. | EG. | ES. | FT. | GB. | GD. |

```
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR,
             KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX,
            MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE,
             SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,
             VN. YU. ZA. ZM. ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
             CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG, BW, GH,
             GM. KE. LS. MW. MZ. NA. SD. SL. SZ. TZ. UG. ZM. ZW. AM. AZ. BY.
             KG, KZ, MD, RU, TJ, TM
     EP 1814552
                                20070808
                                           EP 2005-801609
                         A2
                                                                   20051109
         R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR
     JP 2008519087
                         т
                                20080605
                                            JP 2007-540710
                                                                   20051109
PRIORITY APPLN. INFO.:
                                            GB 2004-24742
                                                                A 20041109
                                            US 2004-626403P
                                                                P 20041109
                                            WO 2005-GB4323
                                                                W 20051109
```

MARPAT 144:488667 OTHER SOURCE(S):

GI

AB The invention is related to quinazolinones I [B-D = N:CH] and derivs., NHCO and derivs.; G = OH, NH2 ad derivs.; E = CONH and derivs., O, S, NH, etc., with proviso; A = a bond and R4 and R4a are absent; or A = saturated hydrocarbon linker containing 1-7 C's, wherein 1 of the C atoms may optionally be replaced by an O or N atom; R1-R3 = independently H, halo, (un)substituted hydrocarbyl; R4 = H, alkyl; R4a = H, alkyl, monocyclic or bicyclic carbocyclyl or heterocyclyl containing up to 3 heteroatoms; or R4 and R4a together with the intervening atom(s) of A form a saturated monocyclic heterocyclic group] or salts, solvates, tautomers or N-oxides thereof, that inhibit or modulate the activity of protein kinase A (PKA) and protein kinase B (PKB), and their use in the treatment or prophylaxis of disease states or conditions mediated by PKA and PKB, such as proliferative diseases. The invention is also related to the preparation of quinazolinones I. Thus, acylation of 4-[(tertbutoxycarbonyl)amino]-2- (3,4-dichlorophenyl)butyric acid with 7-amino-3Hquinazolin-4-one and Boc-deprotection gave quinazolinone II. Selected I inhibited protein kinase A and/or B with IC50 values of less than 50 $\mu\text{M}.$ 669068-16-0P, 4-Aminomethyl-4-(4-chlorophenyl)piperidine-1-

carboxylic acid tert-butyl ester 887129-10-4P, 4-(4-Chlorophenv1)-4-[[[3-(2,4-dimethoxybenzv1)-4-oxo-3,4dihydroquinazolin-7-yl]amino]methyl]piperidine-1-carboxylic acid

II

tert-butvl ester

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of quinazolinones as protein kinase A and/or B inhibitors for treating proliferative diseases)

669068-16-0 CAPLUS

CN

1-Piperidinecarboxylic acid, 4-(aminomethyl)-4-(4-chlorophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 887129-10-4 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(4-chlorophenyl)-4-[[[3-[(2,4dimethoxyphenyl)methyl]-3,4-dihydro-4-oxo-7-quinazolinyl]amino]methyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

$$\begin{array}{c} \text{C1} \\ \text{CH}_2 \text{-NH} \\ \text{T} \text{-CH}_2 \\ \text{OMe} \end{array}$$

L3 ANSWER 7 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2006:411957 CAPLUS Full-text

DOCUMENT NUMBER: 144:450728

TITLE: Ortho-condensed pyridine and pyrimidine derivatives

> (e. g. purines) as protein kinases inhibitors and their preparation, pharmaceutical compositions and use

> for treatment of protein kinase mediated diseases such

as proliferative diseases

INVENTOR(S): Berdini, Valerio; Boyle, Robert George; Saxty, Gordon; Walker, David Winter; Woodhead, Steven John; Wyatt,

Paul Graham; Caldwell, John; Collins, Ian; Da Fonseca,

Tatiana Faria

PATENT ASSIGNEE (S): Astex Therapeutics Ltd., UK; The Institute of Cancer

ResearchRoyal Cancer Hospital; Cancer Research

Technology Limited

SOURCE: PCT Int. Appl., 223 pp., which

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| | | TENT : | | | | | | | APPLICATION NO. | | | | | | | | | |
|------|------------|--------|------|------|-----|-----------------|-----|------|-----------------|----------------|----------------|------|------|-----|----------|-----|------|-----|
| | | 2006 | | | | | | | | | | | | | | | 0051 | |
| | | W: | ΑE, | AG, | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BR, | BW, | BY, | BZ, | CA, | CH, |
| | | | CN, | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | EG, | ES, | FI, | GB, | GD, |
| | | | GE, | GH, | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | KM, | KP, | KR, | KΖ, |
| | | | LC, | LK, | LR, | LS, | LT, | LU, | LV, | LY, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | MZ, |
| | | | NA, | NG, | NI, | NO, | NZ, | OM, | PG, | PH, | PL, | PT, | RO, | RU, | SC, | SD, | SE, | SG, |
| | | | SK, | SL, | SM, | SY, | TJ, | TM, | TN, | TR, | TT, | TZ, | UA, | UG, | US, | UZ, | VC, | VN, |
| | | | YU, | ZA, | ZM, | ZW | | | | | | | | | | | | |
| | | RW: | ΑT, | BE, | BG, | CH, | CY, | CZ, | DE, | DK, | EE, | ES, | FI, | FR, | GB, | GR, | HU, | ΙE, |
| | | | IS, | IT, | LT, | LU, | LV, | MC, | NL, | PL, | PT, | RO, | SE, | SI, | SK, | TR, | BF, | ΒJ, |
| | CF, CG, CI | | | | CI, | CM, | GΑ, | GN, | GQ, | GW, | ML, | MR, | NE, | SN, | TD, | TG, | BW, | GH, |
| | | | GM, | KE, | LS, | MW, | ΜZ, | NA, | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW, | AM, | ΑZ, | BY, |
| | | | KG, | KZ, | MD, | RU, | ТJ, | TM | | | | | | | | | | |
| | EP | 1812 | 004 | | | A1 | | 2007 | 0801 | | EP 2 | 005- | 7976 | 85 | | 2 | 0051 | 025 |
| | | R: | ΑT, | BE, | BG, | CH, | CY, | CZ, | DE, | DK, | EE, | ES, | FI, | FR, | GB, | GR, | HU, | ΙE, |
| | | | IS, | IT, | LI, | LT, | LU, | LV, | MC, | NL, | PL, | PT, | RO, | SE, | SI, | SK, | TR | |
| | JP | 2008 | 5179 | 84 | | T | | 2008 | 0529 | JP 2007-538500 | | | | | 20051025 | | | |
| PRIO | RIT: | Y APP | LN. | INFO | . : | | | | | | GB 2 | 004- | 2365 | 5 | | A 2 | 0041 | 025 |
| | | | | | | | | | | | US 2 | 004- | 6218 | 21P | | P 2 | 0041 | 025 |
| | | | | | | | | | | | US 2 | 005- | 6841 | 19P | | P 2 | 0050 | 524 |
| | | | | | | | | | | | WO 2005-GB4119 | | | | | W 2 | 0051 | 025 |
| GI | R S | DURCE | (S): | | | MARPAT 144:4507 | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| | | | | | | Me_ | мн | | | | | | | | | | | |

AB The invention provides a compound for use as a protein kinase B inhibitor, the compound being a compound of the formula I or salts, solvates, tautomers or Noxides thereof. Compds. of formula I where in T is N or CR5; J1-J2 is N=CR6, R7C=N, R8NCO, (R8)2CO, N=N, or R7C=CR6; E is 5- to 6-membered carbocyclic or heterocyclic group; Q1 is a bond, C1-3 saturated hydrocarbon where one of the carbon atoms may be optionally replaced by O or N, or an adjacent pair of carbons be replaced by CONH and derivs., or NHCO and derivs.; Q2 is a bond, (un) substituted saturated C1-3 hydrocarbon, where one of the carbon atoms my be optionally replaced by N or O; G is H, NH2 and derivs., OH, or SH, with the provision that E is (hetero)aryl and Q2 is a bond, then G is H; R1 is H, or (hetero)aryl; R4, R6, and R8 are independently H, halo, C1-5 saturated hydrocarbyl, CN, CONH2, CONHR9, CF3, NH2, NHCOR9, or NHCONHR9; R5 and R7 are independently H, halo, C1-5 saturated heterocarbyl, CN, or CF3; R9 is (un) substituted Ph, or (un) substituted Bn; or their pharmaceutically acceptable salts, solvates, tautomers, or N-oxides thereof. Example compound II was prepared by amination of 9-(tetrahydropyran-2-v1)-6-chloropurine with 4-(N-Boc)piperidine; the resulting [1-[9-(tetrahydropyran-2-y1)-9H-purin-6vllpiperidin-4- vllcarbamic acid tert-Bu ester underwent methylation with Me

iodide to give methyl-[1-[9-(tetrahydropyran-2-y1)-9H-purin-6-y1]piperidin-4-y1]carbamic acid tert-Bu seter, which underwent hydrolysis to give example compound II. All the invention compds. were tested for their protein kinase inhibitory activity. From the assay it was determined that compound II and some of the other example compds. exhibited IC50 values of less than 10 μM against both protein kinase A and B. The invention compds. were also evaluated for their antiproliferative activity. Many of the invention compds. were found to have IC50 values of less than 25 μM and the preferred compds. have IC50 values of less than 15 μM .

IT 669068-16-0P 885500-47-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of ortho-condensed pyridine and pyrimidine derivs. (e. g. purines) as protein kinases inhibitors useful for treatment of protein kinase mediated diseases such as proliferative diseases)

RN 669068-16-0 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(aminomethyl)-4-(4-chlorophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 885500-47-0 CAPLUS

1-Piperidinecarboxylic acid, 4-(4-chlorophenyl)-4-[(methylamino)methyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 8 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2005:1289687 CAPLUS Full-text

DOCUMENT NUMBER: 144:51568

TITLE: Preparation of substituted 2-quinolyl-oxazoles and their heterocyclic analogs useful as pde4 inhibitors INVENTOR(S): Kuang, Rongze; Blythin, David; Shih, Neng-Yang; Shue, Ho-Jane; Chen, Xiao; Cao, Jianhua; Gu, Danlin; Huang,

Ying; Schwerdt, John H.; Ting, Pauline C.; Wong,

Shing-Chun; Xiao, Li

PATENT ASSIGNEE(S): Schering Corporation, USA SOURCE: PCT Int. Appl., 233 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

GI

| | TENT | | | | KIND DATE | | | APPLICATION NO. | | | | | | DATE | | | |
|---------|-----------------------------|------|-----|-----|-----------|------|------|-----------------|---------------------------------------|----|-------|------|------|------|----------|------|-----|
| | | | | | | | | | | | 2005- | | | | | | |
| | W: | ΑE, | AG, | AL, | AM, | AT, | AU, | AZ, | BA, | BB | , BG, | BR, | BW, | BY, | BZ, | CA, | CH, |
| | | CN, | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ | , EC, | EE, | EG, | ES, | FI, | GB, | GD, |
| | | GE, | GH, | GM, | HR, | HU, | ID, | IL, | IN, | IS | , JP, | KE, | KG, | KM, | KP, | KR, | KZ, |
| | | LC, | LK, | LR, | LS, | LT, | LU, | LV, | MA, | MD | , MG, | MK, | MN, | MW, | MX, | MZ, | NA, |
| | | NG, | NI, | NO, | NZ, | OM, | PG, | PH, | PL, | PT | , RO, | RU, | SC, | SD, | SE, | SG, | SK, |
| | | SL, | SM, | SY, | TJ, | TM, | TN, | TR, | TT, | TZ | , UA, | UG, | US, | UZ, | VC, | VN, | YU, |
| | | ZA, | ZM, | ZW | | | | | | | | | | | | | |
| | RW: | BW, | GH, | GM, | KE, | LS, | MW, | MZ, | NA, | SD | , SL, | SZ, | TZ, | UG, | ZM, | ZW, | AM, |
| | | | | | | | | | | | , BE, | | | | | | |
| | | EE, | ES, | FI, | FR, | GB, | GR, | HU, | IE, | IS | , IT, | LT, | LU, | MC, | NL, | PL, | PT, |
| | | RO, | SE, | SI, | SK, | TR, | BF, | BJ, | CF, | CG | , CI, | CM, | GA, | GN, | GQ, | GW, | ML, |
| | MR, NE, SN | | | | | | | | | | | | | | | | |
| AU | 2005 | 2479 | 06 | | A1 | | 2005 | 1208 | | AU | 2005- | 2479 | 06 | | 2 | 0050 | 516 |
| CA | AU 2005247906
CA 2565599 | | | | | | 2005 | 1208 | | CA | 2005- | 2565 | 599 | | 2 | 0050 | 516 |
| US | 2006 | 0106 | 062 | | A1 | | 2006 | 0518 | | US | 2005- | 1303 | 59 | | 2 | 0050 | 516 |
| EP | 1758 | 883 | | | A1 | | 2007 | 0307 | | EΡ | 2005- | 7500 | 76 | | 2 | 0050 | 516 |
| | R: | ΑT, | BE, | BG, | CH, | CY, | CZ, | DE, | DK, | EE | , ES, | FI, | FR, | GB, | GR, | HU, | ΙE, |
| | | IS, | IT, | LI, | LT, | LU, | MC, | NL, | PL, | PT | , RO, | SE, | SI, | SK, | TR, | AL, | BA, |
| | | | | MK, | | | | | | | | | | | | | |
| CN | 1984 | 901 | | | A | | 2007 | 0620 | | CN | 2005- | 8002 | 3666 | | 2 | 0050 | 516 |
| BR | 2005 | 0112 | 95 | | A | | 2007 | 1204 | | BR | 2005- | 1129 | 5 | | 2 | 0050 | 516 |
| JP | 2007
2864 | 5373 | 00 | | T | | | | | | 2007- | | | | | | |
| TW | 2864 | 75 | | | В | | 2007 | 0911 | | TW | 2005- | 9411 | 5924 | | 2 | 0050 | 517 |
| MX | MX 2006PA13414 | | | | | | 2007 | 0123 | 3 MX 2006-PA13414
0 KR 2006-724186 | | | | | | 2 | 0061 | 117 |
| KR | KR 2007013306 | | | | | | 2007 | 0130 | 0 KR 2006-724186 | | | | | | 2 | 0061 | 117 |
| IN | IN 2006CN04254 | | | | | | 2007 | 0629 | 9 IN 2006-CN4254 | | | | | | 2 | 0061 | 117 |
| | | | | | | | 2007 | 0216 | 6 NO 2006-5830 | | | | | | 20061215 | | 215 |
| PRIORIT | PRIORITY APPLN. INFO.: | | | | | | | | | | 2004- | | | | | | |
| | | | | | | | | | | | 2005- | | | | W 2 | 0050 | 516 |
| OTHER S | OURCE | (S): | | | CAS | REAC | T 14 | 4:51 | 568; | MA | RPAT | 144: | 5156 | 8 | | | |
| GI | | | | | | | | | | | | | | | | | |

AB Title compde. I [Rl = H, alkyl, cycloalkyl; R2, R3 and R5 independently = H or halo; R4 = H, halo, alkyl, etc.; A = substituted oxazolyl, imidazole, thiazole or pyrrolel, and their pharmaceutically acceptable salts, are prepared and disclosed as pde4 inhibitors. Thus, e.g., II was prepared in a multistep synthesis from 2-trifluoromethyl-8-methoxyquinolin-5-yl carboxylic acid. In PDE4 assays, selected compds. possessed IC50 values ranging from 0.01-1.8 nM. Also claimed are pharmaceutical compns., the use of the compds. as PDE4 inhibitors, and combinations with other actives.

IT 871000-79-2P

CN

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of substituted quinolyloxazoles and their heterocyclic analogs useful as PDE4 inhibitors)

RN 871000-79-2 CAPLUS

Acetamide, N-[[1-[[5-(aminomethyl)-2-[8-methoxy-2-(trifluoromethyl)-5-quinolinyl]-4-oxazolyl]carbonyl]-4-phenyl-4-piperidinyl]methyl]- (CA INDEX NAME)

L3 ANSWER 9 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2005:470969 CAPLUS Full-text

DOCUMENT NUMBER: 143:26636

TITLE: Preparation of 4-[(Arylmethyl)aminomethyl]piperidines as inhibitors of NGF binding (nerve growth factor) to

p75NTR (p75 neurotrophic) receptor for treating p75NTR

APPLICATION NO

DATE

related diseases

INVENTOR(S): Bosch, Michael; Wagnon, Jean
PATENT ASSIGNEE(S): Sanofi-Synthelabo, Fr.

KIND DATE

SOURCE: Fr. Demande, 31 pp.

CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

GI

| | IENI . | | | | KIN | _ | DATE | | | | LICAT | | | | | | |
|----------|---|------|-----|-----|-------------|-----|------|-------|----------------|------|-------|------|----------|-----|-----|------|-----|
| | 2862 | | | | A1 | | 2005 | 0603 | | | 2003- | | | | | 0031 | |
| FR | 2862 | 968 | | | B1 | | 2006 | 0804 | | | | | | | | | |
| WO | 2005 | 0542 | 29 | | A1 | | 2005 | 0616 | | WO : | 2004- | FR30 | 66 | | 2 | 0041 | 130 |
| | W: | ΑE, | AG, | AL, | AM, | AT, | AU, | AZ, | BA, | BB | , BG, | BR, | BW, | BY, | BZ, | CA, | CH, |
| | | CN, | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ | , EC, | EE, | EG, | ES, | FI, | GB, | GD, |
| | | GE, | GH, | GM, | HR, | HU, | ID, | IL, | IN, | IS | , JP, | KE, | KG, | KP, | KR, | KZ, | LC, |
| | | LK, | LR, | LS, | LT, | LU, | LV, | MA, | MD, | MG | , MK, | MN, | MW, | MX, | MZ, | NA, | NI, |
| | | NO, | NZ, | OM, | PG, | PH, | PL, | PT, | RO, | RU | , sc, | SD, | SE, | SG, | SK, | SL, | SY, |
| | | TJ, | TM, | TN, | TR, | TT, | TZ, | UA, | UG, | US | , UZ, | VC, | VN, | YU, | ZA, | ZM, | ZW |
| | RW: | GM, | KE, | LS, | MW, | MZ, | NA, | SD | , SL, | SZ, | TZ, | UG, | ZM, | ZW, | AM, | | |
| | RW: BW, GH, G
AZ, BY, F
EE, ES, F | | | | KΖ, | MD, | RU, | TJ, | TM, | AT | , BE, | BG, | CH, | CY, | CZ, | DE, | DK, |
| | EE, ES, E | | | | | GB, | GR, | HU, | ΙE, | IS | , IT, | LU, | MC, | NL, | PL, | PT, | RO, |
| | | SE, | SI, | SK, | TR, | BF, | ВJ, | CF, | CG, | CI | , CM, | GA, | GN, | GQ, | GW, | ML, | MR, |
| | | NE, | SN, | TD, | TG | | | | | | | | | | | | |
| EP | 1694 | 668 | | | A1 | | 2006 | 0830 | EP 2004-805590 | | | | | | 2 | 0041 | 130 |
| | R: | AT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | GR | , IT, | LI, | LU, | NL, | SE, | MC, | PT, |
| | | IE, | SI, | LT, | LV, | FI, | RO, | MK, | CY, | AL | , TR, | BG, | CZ, | EE, | HU, | PL, | SK, |
| | | HR, | IS, | YU | | | | | | | | | | | | | |
| JP | JP 2007512384 | | | | | | 2007 | 0517 | JP 2006-541974 | | | 74 | 20041130 | | | | |
| US | US 20070037819 | | | | | | 2007 | 0215 | | US : | 2006- | 4205 | 05 | | 2 | 0060 | 526 |
| PRIORIT: | PRIORITY APPLN. INFO.: | | | | | | | | | FR : | 2003- | 1417 | 2 | 1 | A 2 | 0031 | 201 |
| | | | | | | | WO : | 2004- | FR30 | 66 | 1 | W 2 | 0041 | 130 | | | |
| OTHER SO | OURCE | (S): | | | MARPAT 143: | | | 2663 | 636 | | | | | | | | |

^{*} STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. I [wherein X = (CH2)n; n = 1-2; R1 = CF3; R2 = H, alkyl; R3 = (un)substituted pyrrolyl, 1,2,3-thiadiazolyl, pyrazinyl, etc.; and their salts, hydrates and solvates] were prepared as inhibitors of the binding of 1251 NGF to p'5NTR (p'5 neurotrophic) receptor and of the apoptosis induced NGF (nerve growth factor) for treating p'5NTR related diseases (no data). For example, II was prepared by reacting 1-[4-(aminomethyl)-4-[3-(trifluoromethyl) phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-1-

ethanone (preparation given) and 1-methyl-2-pyrrolecarboxaldehyde in THF in the presence of NaBH(OAc)3/AcOH. I inhibited the binding of 125I NGF to p75NTR receptor with IC50 in the range of 10-11 M to 10-6 M at the biochem. level. I inhibited the pro-apoptic effect induced by NGF, via growing cells expressing preferentially p75NTR, with IC50 in the range of 10-11 M to 10-6 M at the cellular level. 852936-29-9P, [(1-Methyl-1H-pyrrol-2-yl)methyl][[1-[[4-(pyrazin-2v1)piperazin-1-v1]acetv1]-4-[3-(trifluoromethy1)pheny1]piperidin-4vllmethvllamine 852936-31-3P 852936-32-4P. N-Methvl-1-[1-[4-(pvrazin-2-vl)piperazin-1-vl]acetvl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]-N-[(1,3-thiazol-2v1)methv1]methanamine trihvdrochloride 353936-33-5P. (2-Furylmethyl)[[1-[[4-(pyrazin-2-yl)piperazin-1-yl]acetyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]methyl]amine 852935-34-6P , (3-Furylmethyl) [[1-[[4-(pyrazin-2-yl)piperazin-1-yl]acetyl]-4-[3-(trifluoromethyl)phenyllpiperidin-4-vllmethyllamine 852936-35-7P , [(5-Methvl-2-furvl)methvl][[1-[[4-(pyrazin-2-vl)piperazin-1-vl]acetvl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]methyl]amine 852936-36-8P, [(4,5-Dimethyl-2-furyl)methyl](methyl)[[1-[[4-(pyrazin-2-y1)piperazin-1-y1]acety1]-4-[3-(trifluoromethy1)pheny1]piperidi n-4-yl]methyl]amine trihydrochloride 852936-37-9P, [(5-Chloro-2-furyl)methyl](methyl)[[1-[[4-(pyrazin-2-yl)piperazin-1vllacetyll-4-[3-(trifluoromethyl)phenyllpiperidin-4-yllmethyllamine 852936-38-0P, [[1-[[4-(Pyrazin-2-yl)piperazin-1-yl]acetyl]-4-[3-(trifluoromethyl)phenyl|piperidin-4-yl|methyl|[(2-thienyl)methyl|amine 852936-39-19, [[1-[[4-(Pyrazin-2-v1)piperazin-1-v1]acetv1]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]methyl][(3-thienvl)methyl]amine 852936-40-4P, 1-Phenvl-N-[[1-[[4-(pvrazin-2-v1)piperazin-1yl]acetyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]methyl]methanamine 852936-41-5P, [[1-[[4-(Pyrazin-2-v1)piperazin-1-v1]acetv1]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]methyl][(pyridin-2-yl)methyl]amine 852936-42-6P, N-Methyl-1-[1-[[4-(pyrazin-2-yl)piperazin-1vl]acetyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]-N-[(pyridin-2y1)methyl]methanamine 852936-43-7P, N-Methyl-1-[1-[[4-(pyrazin-2vl)piperazin-1-vl]acetvl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-vl]-N-[(pyridin-3-y1)methy1]methanamine tetrahydrochloride 852936-44-8P , N-Methyl-1-[1-[4-(pyrazin-2-v1)piperazin-1-v1]acetv1]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]-N-[(pyridin-4v1)methv1]methanamine tetrahvdrochloride 852936-45-9P, N-Methyl-1-(pyrazin-2-yl)-N-[[1-[[4-(pyrazin-2-yl)piperazin-1-yl]acetyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-vl]methyl]methanamine tetrahydrochloride 852936-46-0P, [(6-Methylpyridin-2v1)methv1][[1-[[4-(pyrazin-2-v1)piperazin-1-v1]acetv1]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]methyl]amine 852936-47-1P , [(3-Methyl-2-thienyl)methyl][[1-[[4-(pyrazin-2-yl)piperazin-1-yl]acetyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]methyl]amine trihydrochloride 852936-48-2P 852936-49-3P, N-Methyl-1-[1-[[4-(pyrazin-2v1)piperazin-1-v1]acetv1]-4-[3-(trifluoromethv1)phenv1]piperidin-4-v1]-N-[(pyrimidin-5-yl)methyl]methanamine 852936-50-6P, (1H-Imidazol-2-vlmethvl) (methvl) [[1-[[4-(pvrazin-2-vl)piperazin-1yl]acetyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]methyl]amine 852936-51-7P, (1H-Imidazol-5-ylmethyl)(methyl)[[1-[[4-(pyrazin-2vl)piperazin-1-vl]acetyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-

(drug candidate; preparation of 4-[(arylmethyl)aminomethyl]piperidines as

N-Methyl-1-(4-methyl-1H-imidazol-5-yl)-N-[[1-[[4-(pyrazin-2-yl)piperazin-1-yl]acetyl]-4-[3-(trifluoromethyl)phenyl]pyridin-4-yl]methyl]methanamine RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

yl]methyl]amine tetrahydrochloride 852936-52-8P,

(Uses)

NGF binding inhibitors to p75NTR receptor and of the apoptosis induced by NGF)

- RN 852936-29-9 CAPLUS
- ON Ethanone, 1-[4-[[[(1-methyl-1H-pyrrol-2-yl)methyl]amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-(CA INDEX NAME)

- RN 852936-31-3 CAPLUS
- CN Ethanone, 1-[4-[[methyl]((1-methyl-1H-imidazol-2-yl)methyl]amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1piperazinyl]-, ethanedioate (1:1) (CA INDEX NAME)
 - CM 1
 - CRN 852936-30-2
 - CMF C29 H37 F3 N8 O

- CM 2
- CRN 144-62-7
- CMF C2 H2 O4

- RN 852936-32-4 CAPLUS
- CN Ethanone, 1-[4-[[methyl(2-thiazolylmethyl)amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-, hydrochloride (1:3) (CA INDEX NAME)

■3 HC1

RN 852936-33-5 CAPLUS

CN Ethanone, 1-[4-[[(2-furanylmethy1)amino]methy1]-4-[3-(trifluoromethy1)pheny1]-1-piperidiny1]-2-[4-(2-pyraziny1)-1-piperaziny1]-(CA INDEX NNBE)

RN 852936-34-6 CAPLUS

CN Ethanone, 1-[4-[((3-furanylmethyl)amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-(CA INDEX NNBE)

RN 852936-35-7 CAPLUS

CN Ethanone, 1-[4-[[[(5-methyl-2-furanyl)methyl]amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-(CA INDEX NAME)

RN 852936-36-8 CAPLUS

CN Ethanone, 1-[4-[[[(4,5-dimethyl-2-furanyl)methyl]methylamino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-, hydrochloride (1:3) (CA INDEX NAME)

RN 852936-37-9 CAPLUS

CN Ethanone, 1-[4-[[[(5-chloro-2-furanyl)methyl]methylamino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-(CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \text{C1} \\ \text{CH}_2 \\ \text{H}_2 \\ \text{CH}_2 \\ \text{CH}_2 \\ \text{CH}_2 \\ \text{CH}_2 \\ \text{CH}_3 \\ \text{CH}_2 \\ \text{CH}_3 \\ \text{CH}_4 \\ \text{CH}_2 \\ \text{CH}_4 \\ \text{CH}_5 \\ \text{CH}_6 \\ \text{CH$$

RN 852936-38-0 CAPLUS

CN

Ethanone, 2-[4-(2-pyraziny1)-1-piperaziny1)-1-[4-[[(2-thienylmethy1)amino]methy1]-4-[3-(trifluoromethy1)pheny1]-1-piperidiny1]-(CA INDEX NAME)

RN 852936-39-1 CAPLUS

CN Ethanone, 2-[4-(2-pyraziny1)-1-piperaziny1)-1-[4-[[(3-thienylmethy1)amino]methy1]-4-[3-(trifluoromethy1)pheny1]-1-piperidiny1]-(CA INDEX NAME)

RN 852936-40-4 CAPLUS

CN Ethanone, 1-[4-[(phenylmethyl)amino]methyl]-4-[3-(trifluoromethyl)phenyl]1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]- (CA INDEX NAME)

$$\begin{array}{c} \text{CF}_3 \\ \text{CH}_2 - \text{NH} - \text{CH}_2 - \text{Ph} \\ \end{array}$$

RN 852936-41-5 CAPLUS

CN Ethanone, 2-[4-(2-pyrazinyl)-1-piperazinyl]-1-[4-[[(2pyridinylmethyl)amino|methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-(CA INDEX NAME)

RN 852936-42-6 CAPLUS

CN Ethanone, 1-[4-[[methyl(2-pyridinylmethyl)amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-(CA INDEX NAME)

RN 852936-43-7 CAPLUS

CN Ethanone, 1-[4-[[methyl(3-pyridinylmethyl)amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-, hydrochloride (1:4) (CA INDEX NAME)

RN 852936-44-8 CAPLUS

CN

Ethanone, 1-[4-[[methyl!d-pyridinylmethyl]amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-, hydrochloride (1:4) (CA INDEX NAME)

●4 HC1

RN 852936-45-9 CAPLUS

CN Ethanone, 1-[4-[[methyl(2-pyrazinylmethyl)amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-, hydrochloride (1:4) (CA INDEX NAME)

●4 HCl

RN 852936-46-0 CAPLUS

CN Ethanone, 1-[4-[[[(6-methyl-2-pyridinyl)methyl]amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-(CA INDEX NNBE)

RN 852936-47-1 CAPLUS

CN Ethanone, 1-[4-[[[(3-methyl-2-thienyl)methyl]amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-, hydrochloride (1:3) (CA INDEX NAME)

3 HC1

RN 852936-48-2 CAPLUS

CN Ethanone, 1-[4-[[methyl](5-methyl-2-thienyl)methyl]amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-, hydrochloride (1:1) (CA INDEX NAME)

Me
$$CH_2$$
 H_2 H_3 CH_4 H_4 H_5 H_5 H_5 H_6 H_6

RN 852936-49-3 CAPLUS

CN Ethanone, 1-[4-[[methyl(5-pyrimidinylmethyl)amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-(CA INDEX NNBE)

RN 852936-50-6 CAPLUS

CN Ethanone, 1-[4-[[(1H-imidazol-2-ylmethyl)methylamino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-(OA INDEX NAME)

RN 852936-51-7 CAPLUS

CN Ethanone, 1-[4-[[(lH-imidazol-5-ylmethyl)methylamino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-, hydrochloride (l:4) (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \text{CH}_2 \\ \text{H}_2 \\ \text{CH}_2 \\ \text{H}_3 \\ \text{CH}_2 \\ \text{CH}_2 \\ \text{CH}_2 \\ \text{Me} \end{array}$$

●4 HCl

RN 852936-52-8 CAPLUS

CN Ethanone, 1-[4-[[methyl](4-methyl-lH-imidazol-5-yl)methyl]amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1piperazinyl]- (CA INDEX NAME)

IT 850936-54-0P, tert-Butyl [[1-[2-[4-(2-pyrazinyl)-1piperazinvl]acetvl]-4-[3-(trifluoromethyl)phenyl]-4-

piperazinyi]acetyi]-4-[3-(triffuorometnyi)pnen piperidinyl]methyl]carbamate

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of 4-[(arylmethyl)aminomethyl]piperidines as NGF binding inhibitors to p75NTR receptor and of the apoptosis induced by NGF)

RN 852936-54-0 CAPLUS

CN Carbamic acid, methyl[[1-[(4-pyrazinyl-1-piperazinyl)acetyl]-4-[3-(trifluoromethyl)phenyl]-4-piperidinyl]methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

$$\bigcap_{H_2} \prod_{h_1} \prod_{H_2} \prod_{h_2} \prod_{h_3} \prod_{h_4} \prod_{h_5} \prod_{h$$

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 10 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2005:470968 CAPLUS Full-text

DOCUMENT NUMBER: 143:26635

TITLE: Preparation of (4-Phenylpiperazin-1-yl)acylpiperidine derivatives as inhibitors of NGF binding (nerve growth

factor) to p75NTR (p75 neurotrophic) receptor for treating p75NTR related diseases

INVENTOR(S): Dos Santos, Victor; Wagnon, Jean PATENT ASSIGNEE(S): Sanofi-Synthelabo, Fr.

SOURCE: Fr. Demande, 49 pp.

CODEN: FRXXBL DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| | TENT | | | | | | DATE | | | APPL | | | | DATE | | | |
|---------|------------------------|------|-----|-----|-----|-----|------|------|----------------|----------------|------|------|-----|------|-----|------|-----|
| | 2862 | | | | | | 2005 | 0603 | | FR 2 | 003- | 1417 | 3 | | 2 | 0031 | 201 |
| | 2862 | | | | | | | | | | | | | | | | |
| WO | 2005 | 0542 | 27 | | A1 | | 2005 | 0616 | | WO 2 | 004- | FR30 | 67 | | 2 | 0041 | 130 |
| | W: | ΑE, | AG, | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BR, | BW, | BY, | BZ, | CA, | CH, |
| | | CN, | co, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | EG, | ES, | FI, | GB, | GD, |
| | | GE, | GH, | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | KP, | KR, | KZ, | LC, |
| | | LK, | LR, | LS, | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | MZ, | NA, | NI, |
| | | NO, | NZ, | OM, | PG, | PH, | PL, | PT, | RO, | RU, | SC, | SD, | SE, | SG, | SK, | SL, | SY, |
| | | TJ, | TM, | TN, | TR, | TT, | TZ, | UA, | UG, | US, | UZ, | VC, | VN, | YU, | ZA, | ZM, | ZW |
| | RW: | BW, | GH, | GM, | KE, | LS, | MW, | MZ, | NA, | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW, | AM, |
| | | AZ, | BY, | KG, | KZ, | MD, | RU, | TJ, | TM, | AT, | BE, | BG, | CH, | CY, | CZ, | DE, | DK, |
| | | EE, | ES, | FI, | FR, | GB, | GR, | HU, | IE, | IS, | IT, | LU, | MC, | NL, | PL, | PT, | RO, |
| | | SE, | SI, | SK, | TR, | BF, | ВJ, | CF, | CG, | CI, | CM, | GA, | GN, | GQ, | GW, | ML, | MR, |
| | | NE, | SN, | TD, | TG | | | | | | | | | | | | |
| EP | 1699 | 778 | | | A1 | | 2006 | 0913 | EP 2004-805591 | | | | 91 | | 2 | 0041 | 130 |
| | R: | AT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | GR, | IT, | LI, | LU, | NL, | SE, | MC, | PT, |
| | | ΙE, | SI, | LT, | LV, | FI, | RO, | MK, | CY, | AL, | TR, | BG, | CZ, | EE, | HU, | PL, | SK, |
| | | HR, | IS | | | | | | | | | | | _,,, | | | |
| JP | 2007 | 5123 | 85 | | T | | 2007 | 0517 | | JP 2006-541975 | | | 75 | | 2 | 0041 | 130 |
| US | 2007 | 0021 | 609 | | A1 | | 2007 | 0125 | | US 2 | 006- | 4205 | 08 | | 2 | 0060 | 526 |
| PRIORIT | PRIORITY APPLN. INFO.: | | | | | | | | | FR 2 | 003- | 1417 | 3 | | A 2 | 0031 | 201 |
| | | | | | | | | | | WO 2 | 004- | FR30 | 67 | 1 | W 2 | 0041 | 130 |
| OTHER S | OURCE | (S): | | | MAR | PAT | 143: | | | | | | | | | | |

AB

halo; R3 = H, OH and derivs., NH2 and derivs., etc.; R4 = (un)substituted Ph; their free bases, or acid addition salts, and their hydrates or solvates] were prepared as inhibitors of the binding of 1251 NGF to p75NTR (p75 neurotrophic) receptor and of the apoptosis induced by NGF (nerve growth factor) for treating p75NTR related diseases (no data). For example, II. HCl was prepared by reacting 2-chloro-1-[4-hydroxy-4-[3- (trifluoromethyl)phenyl]-1piperidinyl]-1-ethanone (preparation given) with 1-[3-(trifluoromethyl)phenyl]piperazine in the presence of KI/K2CO3/MeCN. I inhibited the binding of 1251 NGF to p75NTR receptor with IC50 in the range of 10-11 M to 10-6 M at the biochem. level. I inhibited the pro-apoptic effect induced by NGF, via growing cells expressing preferentially p75NTR, with IC50 in the range of 10-11 M to 10-6 M at the cellular level. IT 852937-04-3P, [[1-[(4-Phenylpiperazin-1-yl)acetyl]-4-[3-(trifluoromethyl)phenyl|piperidin-4-yl|methyl|amine trihydrochloride 652937-05-4P, (2-Furylmethyl)[[1-[(4-phenylpiperazin-1-yl)acetyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]methyl]amine 852937-06-5P, [[1-[(4-Phenylpiperazin-1-vl)acetvl]-4-[3-(trifluoromethyl)phenyl)piperidin-4-yl]methyl][(2-thienyl)methyl]amine 852937-09-8P 852937-11-2P, [[1-[(4-Phenylpiperazin-1y1)acety1]-4-[3-(trifluoromethy1)pheny1]piperidin-4-y1]methy1][(pyridin-3v1)methv1]amine dioxalate 852937-13-4P 852937-14-5P, N-Methyl-1-[1-[(4-phenylpiperazin-1-yl)acetyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]methanamine dihydrochloride 852937-15-6P, N,N-Dimethyl-1-[1-[(4-phenylpiperazin-1-yl)acetyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]methanamine 852937-16-7P , N-Methyl-N-[[1-[(4-phenylpiperazin-1-vl)acetyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]methyl]ethanamine dihydrochloride 852937-17-8P, [[1-[[4-(4-Fluorophenyl)piperazin-1-yl]acetyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]methyl]amine trihydrochloride 852937-18-9P, [[1-[[4-(3-Methoxyphenyl)piperazin-1-yl]acetyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]methyl]amine dihydrochloride 952937-19-0F, [[1-[[4-(3,4-Dichlorophenyl)piperazin-1-yl]acetyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]methyl]amine 852937-20-39, [[1-[[4-(2,4-Dimethylphenyl)piperazin-1-vl]acetyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]methyl]methylamine dihydrochloride 852937-21-4P, [[1-[[4-(2,4-Dimethylphenyl)piperazin-1-yl]acetyl]-4-[3-(trifluoromethyl)phenyl]piperid

Title compds. I [wherein n = 1-2; R1 = halo, CF3, alkyl, alkoxy, OCF3; R2 = H,

in-4-vllmethvlldimethvlamine dihydrochloride 852937-22-5P. [1-[4-(3,4-Dimethoxyphenyl)piperazin-1-yl]acetyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]methyl]amine trihydrochloride \$52937-23-69, [[1-[[4-(3,4-Dimethoxyphenyl)piperazin-1-yl]acetyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]methyl]dimethylamine trihydrochloride 852937-24-7P, N-Ethyl-N-[[1-[[4-(3methoxyphenyl)piperazin-1-yl]acetyl]-4-[3-(trifluoromethyl)phenyl]piperidi n-4-v1]methv1]ethanamine dihvdrochloride 852937-26-9P, [[1-[[4-(3,4-Dimethoxyphenyl)piperazin-1-yl]acetyl]-4-[3-(trifluoromethyl)phenyllpiperidin-4-vllmethyllmethylamine 852937-39-4P, [[1-[[4-(3,4-Dimethoxyphenyl)piperazin-1-y1]acety1]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]methyl][(2furyl)methyl]methylamine 852937-40-7P, 9-(3-Furylmethyl)[[1-[(4phenylpiperazin-1-yl)acetyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4v1]methv1]amine 852937-41-8F, [[1-[[4-(2,3-Dimethylphenyl)piperazin-1-yl]acetyl]-4-[3-(trifluoromethyl)phenyl]piperid in-4-v1]methv1]amine 852937-47-4P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (drug candidate; preparation of phenylpiperazinylacylpiperidines as NGF

binding inhibitors to p75NTR receptor and of the apoptosis induced by NGF)

852937-04-3 CAPLUS

RN

CN Ethanone, 1-[4-(aminomethyl)-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]2-(4-phenyl-1-piperazinyl)-, hydrochloride (1:3) (CA INDEX NAME)

$$\mathsf{F}_{\mathsf{3C}} = \mathsf{CH}_2 - \mathsf{N} \mathsf{H}_2 \mathsf{Ph}$$

3 HC1

RN 852937-05-4 CAPLUS

Ethanone, 1-[4-[((2-furanylmethyl)amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-(4-phenyl-1-piperazinyl)- (CA INDEX NAME)

RN 852937-06-5 CAPLUS

CN Ethanone, 2-(4-phenyl-1-piperazinyl)-1-[4-[[(2-thienylmethyl)amino]methyl]-

4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]- (CA INDEX NAME)

RN 852937-09-8 CAPLUS

CN Ethanone, 2-(4-phenyl-1-piperazinyl)-1-[4-[[(2-pyridinylmethyl)]aminojmethyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-, ethanedioate (1:1) (CA INDEX NAME)

CM 1

CRN 852937-08-7 CMF C31 H36 F3 N5 O

CM :

CRN 144-62-7 CMF C2 H2 O4

RN 852937-11-2 CAPLUS

CN Ethanone, 2-(4-phenyl-1-piperazinyl)-1-[4-[[(3-pyridinylmethyl)amino|methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-, ethanedioate (1:2) (CA INDEX NAME)

CM 1

CRN 852937-10-1 CMF C31 H36 F3 N5 O

$$\begin{array}{c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & \\ & & \\ & & \\$$

CM 2

CRN 144-62-7

CMF C2 H2 O4

CN

RN 852937-13-4 CAPLUS

Ethanone, 2-(4-phenyl-1-piperazinyl)-l-[4-[[(4-pyridinylmethyl)amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-, ethanedioate (1:1) (CA INDEX NAME)

CM 1

CRN 852937-12-3

CMF C31 H36 F3 N5 O

CM 2

CRN 144-62-7 CMF C2 H2 O4

CMF CZ HZ O

RN 852937-14-5 CAPLUS

CN Ethanone, 1-[4-[(methylamino)methyl]-4-[3-(trifluoromethyl)phenyl]-1piperidinyl]-2-(4-phenyl-1-piperazinyl)-, hydrochloride (1:2) (CA INDEX NAME)

●2 HC1

RN 852937-15-6 CAPLUS

CN Ethanone, 1-[4-[(dimethylamino)methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-(4-phenyl-1-piperazinyl)- (CA INDEX NAME)

RN 852937-16-7 CAPLUS

CN Ethanone, 1-[4-[(ethylmethylamino)methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-(4-phenyl-1-piperazinyl)-, hydrochloride (1:2) (CA INDEX NAME)

●2 HCl

RN 852937-17-8 CAPLUS

CN Ethanone, 1-[4-(aminomethyl)-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(4-fluorophenyl)-1-piperazinyl]-, hydrochloride (1:3) (CA INDEX NAME)

HC1

RN 852937-18-9 CAPLUS

N Ethanone, 1-[4-(aminomethyl)-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(3-methoxyphenyl)-1-piperazinyl]-, hydrochloride (1:2) (CA INDEX NAME)

RN 852937-19-0 CAPLUS

CN Ethanone, 1-[4-(aminomethy1)-4-[3-(trifluoromethy1)pheny1]-1-piperidiny1]-2-[4-(3,4-dichloropheny1)-1-piperaziny1]- (CA INDEX NAME)

RN 852937-20-3 CAPLUS

CN Ethanone, 2-[4-(2,4-dimethylphenyl)-1-piperazinyl]-1-[4-[(methylamino|methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-, hydrochloride (1:2) (CA INDEX NAME)

●2 HC1

RN 852937-21-4 CAPLUS

CN Ethanone, 1-[4-[(dimethylamino)methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2,4-dimethylphenyl)-1-piperazinyl]-, hydrochloride (1:2) (CA INDEX NAME)

■2 HC1

RN

CN Ethanone, 1-[4-(aminomethyl)-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(3,4-dimethoxyphenyl)-1-piperazinyl]-, hydrochloride (1:3) (CA INDEX NAME)

RN 852937-23-6 CAPLUS

CN Ethanone, 2-[4-(3,4-dimethoxyphenyl)-1-piperazinyl]-1-[4-[(dimethylamino)methyl]-4-[3-(trifluozomethyl)phenyl]-1-piperidinyl]-, hydrochloride (1:3) (CA INDEX NAME)

RN 852937-24-7 CAPLUS

CN Ethanone, 1-[4-[(diethylamino)methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(3-methoxyphenyl)-1-piperazinyl]-, hydrochloride (1:2) (CA INDEX NAME)

2 HC1

RN 852937-26-9 CAPLUS

CN Ethanone, 2-[4-(3,4-dimethoxyphenyl)-1-piperazinyl]-1-[4-[(methylamino)methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]- (CA INDEX NAME)

RN 852937-39-4 CAPLUS

CN Ethanone, 2-[4-(3,4-dimethoxyphenyl)-1-piperazinyl]-1-[4-[[(2-furanylmethyl)methyl]mino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]- (CA INDEX NAME)

RN 852937-40-7 CAPLUS

CN Ethanone, 1-[4-[[(3-furanylmethyl)amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-(4-phenyl-1-piperazinyl)- (CA INDEX NAME)

PAGE 2-A

RN 852937-41-8 CAPLUS

CN Ethanone, 1-[4-(aminomethyl)-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2,3-dimethylphenyl)-1-piperazinyl]- (CA INDEX NAME)

RN 852937-47-4 CAPLUS

CN Ethanone, 1-[4-(aminomethyl)-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-(4-phenyl-1-piperazinyl)-, hydrochloride (1:1) (CA INDEX NAME)

$$\mathsf{F}_3\mathsf{C} = \mathsf{CH}_2 - \mathsf{NH}_2$$

HC1

- IT 852937-43-0P, tert-Butyl 4-(Aminomethyl)-4-[3-
 - (trifluoromethyl)phenyl]piperidine-1-carboxylate 852937-44-1P,
 - tert-Butyl 4-[(Dimethylamino)methyl]-4-[3-(trifluoromethyl)phenyl)piperidi
 - ne-1-carboxylate 852937-48-5F, tert-Butyl [[1-[2-(4-phenylpiperazin-1-y1)ethanoyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-
 - yl]methyl]carbamate 852937-49-6P, tert-Butyl
 - methyl[[1-[2-(4-phenylpiperazin-1-yl)ethanoyl]-4-[3-
 - (trifluoromethyl)phenyl]piperidin-4-yl]methyl]carbamate
 - RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 - (intermediate; preparation of phenylpiperazinylacylpiperidines as NGF binding inhibitors to p75NTR receptor and of the apoptosis induced by NGF)
- RN 852937-43-0 CAPLUS
- CN 1-Piperidinecarboxylic acid, 4-(aminomethyl)-4-[3-(trifluoromethyl)phenyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

- RN 852937-44-1 CAPLUS
- CN 1-Piperidinecarboxylic acid, 4-[(dimethylamino)methyl]-4-[3-(trifluoromethyl)phenyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

- RN 852937-48-5 CAPLUS
- CN Carbamic acid, [[1-[(4-phenyl-1-piperazinyl)acetyl]-4-[3-(trifluoromethyl)phenyl]-4-piperidinyl]methyl]-, 1,1-dimethylethyl ester (901) (CA INDEX NAME)

RN 852937-49-6 CAPLUS

CN Carbamic acid, methyl[[1-[(4-phenyl-1-piperazinyl)acetyl]-4-[3-(trifluoromethyl)phenyl]-4-piperidinyl]methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

$$F_3 \subset \bigcup_{\substack{\mathsf{CH}_2 = \mathsf{II} - \mathsf{C} = \mathsf{OBu-t} \\ \mathsf{Ne}}} \bigcap_{\mathsf{B}} \mathsf{Ph}$$

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 11 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2005:220128 CAPLUS Full-text

disorders

DOCUMENT NUMBER: 142:298111

TITLE: Preparation of 2-substituted benzimidazole piperidines as selective melanin concentrating hormone receptor antagonists for the treatment of obesity and related

INVENTOR(S): Burnett, Duane A.; Wu, Wen-Lian; Sasikumar,

Thavalakulamgara K.; Greenlee, William J.; Caplen, Mary Ann; Guo, Tao; Hunter, Rachael Catherine

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 57 pp.

CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

| PATENT | NO. | | | KIN | D | DATE | | | APPL | ICAT | ION | NO. | | D | ATE | |
|---------|------|-----|-----|-----|-----|------|------|-----|------|-------|------|-----|-----|-----|------|-----|
| | | | | | - | | | | | | | | | - | | |
| US 2005 | 0054 | 628 | | A1 | | 2005 | 0310 | | US 2 | 004- | 9265 | 57 | | 2 | 0040 | 826 |
| CA 2536 | 929 | | | A1 | | 2005 | 0317 | | CA 2 | 004- | 2536 | 929 | | 2 | 0040 | 826 |
| WO 2005 | 0237 | 98 | | A1 | | 2005 | 0317 | | WO 2 | 004-1 | JS27 | 734 | | 2 | 0040 | 826 |
| W: | ΑE, | AG, | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BR, | BW, | BY, | BZ, | CA, | CH, |
| | CN, | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | EG, | ES, | FI, | GB, | GD, |
| | GE, | GH, | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | KP, | KR, | KΖ, | LC, |
| | LK, | LR, | LS, | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | ΜZ, | NA, | NI, |
| | NO, | NZ, | OM, | PG, | PH, | PL, | PT, | RO, | RU, | SC, | SD, | SE, | SG, | SK, | SL, | SY, |
| | ΤJ, | TM, | TN, | TR, | TT, | TZ, | UA, | UG, | US, | UZ, | VC, | VN, | YU, | ZA, | ZM, | ZW |
| RW: | BW, | GH, | GM, | KE, | LS, | MW, | ΜZ, | NA, | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW, | AM, |
| | AZ, | BY, | KG, | KZ, | MD, | RU, | TJ, | TM, | ΑT, | BE, | BG, | CH, | CY, | CZ, | DE, | DK, |

EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG EP 1664022 20060607 EP 2004-782252 20040826 A1 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR CN 1845916 Α 20061011 CN 2004-80024937 20040826 JP 2007504146 Τ JP 2006-524846 20070301 20040826 MX 2006PA02372 Α 20060620 MX 2006-PA2372 20060228 US 2003-498876P PRIORITY APPLN. INFO.: P 20030829 W 20040826 WO 2004-US27734 OTHER SOURCE(S): CASREACT 142:298111; MARPAT 142:298111

Ι

AB Title compds. I [Y = bond, divalent alkyl, etc.; M = 0-1; n = 0, 2, 3; Ar = (hetero)aryl, R1 = H, alkyl, cycloalkyl, etc.; R4 = OH, alkowy, etc.] are prepared For instance, II is prepared in 9 steps from 4-aminomethyl-1-bensyl-4-phenylpiperidine, 4,5-difluorobenzene-1,2-diamine and 3-cyanobenzeneboronic acid. In a selected example, a Ki of 3 nM for the melanin concentrating hormone (MCH) receptor is observed I are useful in treating obesity, metabolic disorders, eating disorders, e.g., hyperphagia and diabetes.

IT 647614-74-8P RL: PAC (Pharmacological activity

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 2-substituted benzimidazole piperidines as selective melanin concentrating hormone receptor antagonists for treatment of obesity and related disorders) ${\rm constant}$

RN 847614-74-8 CAPLUS

1 l-Piperidinecarboxylic acid, 4-(3'-cyano[1,1'-biphenyl]-4-yl)-4-[[(5,6-difluoro-1H-benzimidazol-2-yl)amino]methyl]-, methyl ester (CA INDEX NAME)

- IT 847615-45-6
 - RL: RCT (Reactant); RACT (Reactant or reagent) (preparation of 2-substituted benzimidazole piperidines as selective melanin concentrating hormone receptor antagonists for treatment of obesity and related disorders)
- RN 847615-45-6 CAPLUS
- CN 1-Piperidinecarboxylic acid, 4-(4-bromophenyl)-4-[[(5,6-difluoro-1H-benzimidazol-2-yl)amino]methyl]-, methyl ester (CA INDEX NAME)

- IT 847614-99-7P 847615-00-3P 847615-01-4P
 - RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 - (preparation of 2-substituted benzimidazole piperidines as selective melanin concentrating hormone receptor antagonists for treatment of obesity and related disorders)
- RN 847614-99-7 CAPLUS
- CN 1-Piperidinecarboxylic acid, 4-phenyl-4-[[(2,2,2-trifluoroacetyl)amino]methyl]-, methyl ester (CA INDEX NAME)

- RN 847615-00-3 CAPLUS
- CN 1-Piperidinecarboxylic acid, 4-(4-bromophenyl)-4-[[(2,2,2-

RN 847615-01-4 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(aminomethyl)-4-(4-bromophenyl)-, methyl ester (CA INDEX NAME)

L3 ANSWER 12 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2004:872662 CAPLUS Full-text

DOCUMENT NUMBER:

141:366128

TITLE:

Preparation of cycloalkylcarbonyl or

heterocycloalkylcarbonyl-substituted spiropiperidines as melanocortin-4 receptor agonists for the treatment

of conditions such as obesity INVENTOR(S):

Guo, Liangqin; He, Shuwen; Jian, Tianying; Lai, Yingjie; Liu, Jian; Nargund, Ravi P.; Sebhat, Iyassu K.; Ujjainwalla, Feroze; Ye, Zhixiong; Young, Jonathan

R. PATENT ASSIGNEE(S):

Merck & Co., Inc., USA PCT Int. Appl., 200 pp.

SOURCE: CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PA | IENT I | | | | KIN | D | DATE | | | APPL | ICAT | ION | NO. | | D | ATE | |
|----|------------|-----|-----|-----|-----|-----|-------------|-----|-----|------|-------|------|-----|-----|-----|------|-----|
| | 2004 | | | | A2 | | 2004 | | | WO 2 | 004-1 | JS97 | 51 | | 2 | 0040 | 331 |
| WO | 2004
W: | ΑE, | AG, | | | AT, | 2005
AU, | AZ, | | | | | | | | | |
| | | GE, | GH, | GM, | HR, | HU, | DE, | IL, | IN, | IS, | JP, | KE, | KG, | KP, | KR, | KZ, | LC, |
| | | , | , | | | | LV,
PL, | | | | | | | | , | | , |
| | RW: | | | | | | TZ, | | | | | | | | | | |

| | BY, | KG, | KZ, | MD, | RU, | ΤJ, | TM, | ΑT, | BE | , BG, | CH, | CY, | CZ, | DE, | DK, | EE, |
|----------|-----------|------|-----|------|-----|------|-------|-----|----|-------|------|------|-----|-----|------|-----|
| | ES, | FI, | FR, | GB, | GR, | HU, | IE, | IT, | LU | , MC, | NL, | PL, | PT, | RO, | SE, | SI, |
| | SK, | TR, | BF, | ВJ, | CF, | CG, | CI, | CM, | GA | , GN, | GQ, | GW, | ML, | MR, | NE, | SN, |
| | | TG | | | | | | | | | | | | | | |
| | 20042278 | | | | | 2004 | 1021 | | AU | 2004- | 2278 | 35 | | 2 | 0040 | 331 |
| | 20042278 | | | | | | 0614 | | | | | | | | | |
| CA | 2520114 | | | A1 | | 2004 | 1021 | | CA | 2004- | 2520 | 114 | | 2 | 0040 | 331 |
| EP | 1613601 | | | A2 | | 2006 | 0111 | | EΡ | 2004- | 7495 | 40 | | 2 | 0040 | 331 |
| | R: AT, | BE, | CH, | DE, | DK, | ES, | FR. | GB, | GR | , IT, | LI, | LU, | NL, | SE, | MC, | PT, |
| | | | | | | | | | | , TR, | | | | | | |
| | 20040090 | | | | | | | | | 2004- | | | | | | |
| CN | 1768041 | | | A | | | | | | 2004- | | | | | | |
| JP | 20065221 | 32 | | T | | 2006 | 0928 | | JP | 2006- | 5094 | 89 | | 2 | 0040 | 331 |
| JP | 3856815 | | | B2 | | | 1213 | | | | | | | | | |
| CN | 10110882 | 5 | | A | | 2008 | 0123 | | CN | 2007- | 1014 | 1003 | | 2 | 0040 | 331 |
| | 20060183 | | | | | 2006 | 0817 | | US | 2005- | 5483 | 50 | | 2 | 0050 | 907 |
| | 7329673 | | | | | 2008 | 0212 | | | | | | | | | |
| | 20050076 | | | | | 2006 | 0830 | | | 2005- | | | | | 0050 | 921 |
| | 2005DN04 | | | | | | 0831 | | | 2005- | | | | | 0050 | |
| | 2005PA10 | | | | | | 1215 | | | 2005- | | | | | 0051 | |
| NO | 20050051 | 66 | | A | | 2005 | 1230 | | | 2005- | | | | | 0051 | |
| PRIORIT: | Y APPLN. | INFO | . : | | | | | | | 2003- | | | | | | |
| | | | | | | | | | | 2004- | | | | | | |
| | | | | | | | | | WO | 2004- | US97 | 51 | | W 2 | 0040 | 331 |
| OTHER SO | DURCE(S): | | | MARP | AT | 141: | 36612 | 28 | | | | | | | | |

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

GΙ

AB Title compds. I or II [X,Y = R62C, R9N, C(:0); Y,X = R62C, R6N, C(:0), R6N:C, O, S, S(:O), SO2; XY = CR6:CR6; Z = R1C, N; A = (CH2)m; E = (CH2)p; R1 = H, amidino, (un) substituted aminoalkyl, iminoylalkyl, alkyl, cycloalkylalkyl, phenylalkyl, naphthylalkyl, or heteroarylalkyl; R2 = (un)substituted Ph, naphthyl, heteroaryl; R4 = H, (un)substituted alkyl, halogen, alkoxy, O2N, F3C, F3CCH2, F3CO, F3CCH2O; R6, R9 = H, (un)substituted alkyl, phenylalkyl, naphthylalkyl, heteroarylalkyl, cycloalkylalkyl, heterocycloalkylalkyl, aminoalkyl, carboxyalkyl, etc.; m , p = 1, 2; n = 0-3] such as III+HCl are prepared as melanocortin-4 receptor agonists for the treatment of obesity and related conditions such as diabetes, bulimia, insulin resistance, and hyperlipidemia; a variety of other conditions, particularly male and female sexual dysfunction and erectile dysfunction, are also potentially treatable with the title compds. Oxoindanospiropiperidinecarboxylate IV is reduced with sodium borohydride and the alc. eliminated in the presence of ptoluenesulfonic acid to give the indenespiropiperidinecarboxylate; Jacobsen epoxidn, of the indene double bond, opening of the epoxide with sodium azide, aziridine formation using a fluorous phosphine, N-methylation of the aziridine, regioselective reduction of the aziridine with sodium borohydride to yield the aminoindanospiropiperidinecarboxylate, acylation with 2acetoxyisobutyryl chloride, hydrolysis of the ester with sodium methoxide and methylation of the alc. with Me iodide, deprotection of the piperidine nitrogen, and acylation with nonracemic trans-4-(2,4- difluorophenyl)-1-tertbutyl-3-pyrrolidinecarboxylic acid vields III. Some of the title compds. bind to the melanocortin-4 receptor with IC50 values of <10 μM and <5 μM (no data). 778627-62-6P 778627-63-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of cycloalkylcarbonyl or

heterocycloalkylcarbonyl-

substituted spiropiperidines as melanocortin-4 receptor agonists for the treatment of conditions such as obesity and male or female sexual dysfunction)

778627-62-6 CAPLUS RN

CN 1-Piperidinecarboxylic acid, 4-(aminomethyl)-4-(4-chloro-3-methylphenyl)-, ethyl ester (CA INDEX NAME)

RN 778627-63-7 CAPLUS

1-Piperidinecarboxylic acid, 4-(4-chloro-3-methylphenyl)-4-CN [[(methylsulfonyl)amino]methyl]-, ethyl ester (CA INDEX NAME)

L3 ANSWER 13 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN 2004:550937 CAPLUS Full-text ACCESSION NUMBER:

DOCUMENT NUMBER: 141:106379

TITLE: A preparation of (piperidinylmethyl)amine derivatives,

useful as NK1 antagonists and selective serotonin reuptake inhibitors (SSRI)

INVENTOR(S): Bernstein, Peter; Warwick, Paul

PATENT ASSIGNEE(S): Astrazeneca AB, Swed.

SOURCE: PCT Int. Appl., 34 pp.

CODEN: PIXXD2 DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

| PATENT | NO. | | | KIN | D | DATE | | | APPL | ICAT | ION | NO. | | D | ATE | |
|---------|------|-----|-----|-----|-----|------|------|-----|------|------|------|-----|-----|-----|------|-----|
| | | | | | - | | | | | | | | | | | |
| WO 2004 | 0567 | 71 | | A1 | | 2004 | 0708 | | WO 2 | 003- | SE20 | 04 | | 2 | 0031 | 218 |
| W: | AE, | AG, | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BR, | BW, | BY, | BZ, | CA, | CH, |
| | CN, | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | EG, | ES, | FI, | GB, | GD, |
| | GE, | GH, | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | KP, | KR, | KZ, | LC, |
| | LK, | LR, | LS, | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | ΜZ, | NI, | NO, |
| | NZ, | OM, | PG, | PH, | PL, | PT, | RO, | RU, | SC, | SD, | SE, | SG, | SK, | SL, | SY, | TJ, |
| | TM, | TN, | TR, | TT, | TZ, | UA, | UG, | US, | UZ, | VC, | VN, | YU, | ZA, | ZM, | ZW | |

```
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
             BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
             ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,
             TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                          AU 2003-291589
     AU 2003291589
                         A1
                               20040714
                                                                  20031218
     EP 1581495
                         A1
                                20051005
                                           EP 2003-768468
                                                                   20031218
     EP 1581495
                         В1
                                20070418
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
                               20060413
                                           JP 2004-562205
     JP 2006512363
                         T
                                                                  20031218
     AT 360001
                         Т
                                20070515
                                           AT 2003-768468
                                                                  20031218
     ES 2286470
                         Т3
                                20071201
                                           ES 2003-768468
                                                                  20031218
     US 20060058352
                               20060316
                                           US 2005-539140
                         A1
                                                                   20050616
PRIORITY APPLN. INFO.:
                                           US 2002-435130P
                                                               P 20021220
                                           WO 2003-SE2004
                                                              W 20031218
OTHER SOURCE(S):
                       MARPAT 141:106379
```

Ar No Re No

AB The invention relates to a preparation of piperidinylamine deriva. of formula I [wherein: Rl and R2 are independently selected from H, CN, CF3, OCF3, halogen, or alk(en/yn)yl, etc.; R3 is H or alkyl; R4 is H, CN, alkyl, or alkoxy; R5 is H or alkyl; Ar is (un)substituted Phi, useful as NK1 antagonists and selective serotonin reuptake inhibitors (SSR1). The prepared invention compds. were screened in SERT binding assay (2nM < Ki < 180nM) and NK1 FLIFR assay (70nM < 1C50 < 2µM). For instance, piperidine derivative II was prepared via amination of 1-iodomethyl-3- cyanonaphthalene by piperidine derivative III with a yield of 51% (example 1).

IT 669068-09-1P 669068-74-0P 719276-18-3P

719276-23-0P

GT

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of piperidinylamine derivs. with NK1 antagonist activity and SSRI activity) ${}^{\prime}$

RN 669068-09-1 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(aminomethyl)-4-(3,4-dichlorophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 669068-74-0 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(aminomethyl)-4-(4-fluorophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 719276-18-3 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[(3-cyano-1-naphthalenyl)methyl]amino]methyl]-4-(4-fluorophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 719276-23-0 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[(3-cyano-1-naphthalenyl)methyl]methylami no]methyl]-4-(4-fluorophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

IT 719276-01-4P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthatic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation), RRCT (Reactant or reagent); USES (Uses) (preparation of piperidinylamine derivs. with NKI antagonist activity and SSRI activity)

RN 719276-01-4 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[(3-cyano-1-naphthalenyl)methyl]amino]methyl]-4-(3,4-dichlorophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

IT 719276-25-2 719276-27-4

RL: RCT (Reactant); RACT (Reactant or reagent)

(reactant: preparation of piperidicylamine derivs with

(reactant; preparation of piperidinylamine derivs. with NK1 antagonist activity and SSRI activity)

RN 719276-25-2 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[(3-cyano-2-methoxy-1-naphthalenyl)methyl]amino|methyl]-4-(4-fluorophenyl)-, 1,1-dimethylethylester (CA INDEX NAME)

RN 719276-27-4 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[(3-cyano-2-ethyl-1-naphthalenyl)methyl]amino]methyl]-4-(4-fluorophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 14 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2004:203811 CAPLUS Full-text

DOCUMENT NUMBER: 140:253448

TITLE: Preparation of N-piperidinylmethyl naphthamide

derivatives as NK1 receptor antagonists and serotonin reuptake inhibitors and their therapeutic uses

INVENTOR(S): Bernstein, Peter; Dantzman, Cathy; Dedinas, Robert;

Shen, Lihong; Warwick, Paul

PATENT ASSIGNEE(S): Astrazeneca AB, Swed. SOURCE: PCT Int. Appl., 59 pp.

CODEN: PIXXD2 Patent

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| | PA: | TENT : | NO. | | | KIN | | DATE | | | | ICAT | | | | | ATE | |
|-------|-----|--------|------|------|-----|-----|-----|------|------|-----|------|-------|------|-----|-----|-----|------|-----|
| | WO | 2004 | 0204 | 11 | | | | 2004 | 0311 | | | | | | | | 0030 | 826 |
| | | W: | ΑE, | AG, | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BR, | BY, | BZ, | CA, | CH, | CN, |
| | | | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | ES, | FΙ, | GB, | GD, | GE, | GH, |
| | | | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | KP, | KR, | KZ, | LC, | LK, | LR, |
| | | | LS, | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | MZ, | NI, | NO, | NZ, | OM, |
| | | | PG, | PH, | PL, | PT, | RO, | RU, | SC, | SD, | SE, | SG, | SK, | SL, | SY, | TJ, | TM, | TN, |
| | | | TR, | TT, | TZ, | UA, | UG, | US, | UZ, | VC, | VN, | YU, | ZA, | ZM, | ZW | | | |
| | | RW: | GH, | GM, | KE, | LS, | MW, | MZ, | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW, | AM, | AZ, | BY, |
| | | | KG, | KZ, | MD, | RU, | TJ, | TM, | ΑT, | BE, | BG, | CH, | CY, | CZ, | DE, | DK, | EE, | ES, |
| | | | FI, | FR, | GB, | GR, | HU, | ΙE, | IT, | LU, | MC, | NL, | PT, | RO, | SE, | SI, | SK, | TR, |
| | | | BF, | ВJ, | CF, | CG, | CI, | CM, | GA, | GN, | GQ, | GW, | ML, | MR, | NE, | SN, | TD, | TG |
| | AU | 2003 | 2535 | 58 | | A1 | | 2004 | 0319 | | AU 2 | 2003- | 2535 | 58 | | 2 | 0030 | 826 |
| | EP | 1549 | 615 | | | A1 | | 2005 | 0706 | | EP 2 | 2003- | 7915 | 29 | | 2 | 0030 | 826 |
| | | R: | AT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | GR, | IT, | LI, | LU, | NL, | SE, | MC, | PT, |
| | | | IE, | SI, | LT, | LV, | FI, | RO, | MK, | CY, | AL, | TR, | BG, | CZ, | EE, | HU, | SK | |
| | JP | 2006 | 5022 | 39 | | T | | 2006 | 0119 | | JP 2 | 2004- | 5697 | 44 | | 2 | 0030 | 826 |
| | US | 2006 | 0241 | 142 | | A1 | | 2006 | 1026 | | US 2 | 2005- | 5253 | 03 | | 2 | 0051 | 104 |
| PRIOF | RIT | Y APP | LN. | INFO | . : | | | | | | SE 2 | 2002- | 2567 | | - 1 | A 2 | 0020 | 829 |
| | | | | | | | | | | | SE 2 | 2002- | 2986 | | - 1 | A 2 | 0021 | 009 |
| | | | | | | | | | | | WO 2 | 2003- | SE13 | 29 | 1 | W 2 | 0030 | 826 |
| OTHER | R S | DURCE | (S): | | | MAR | PAT | 140: | 2534 | 48 | | | | | | | | |

GΙ

AB N-piperidinylmethyl naphthamide derivs. (shown as I; variables defined below; e.g. II as monocitrate hemihydrate), in vivo-hydrolyzable precursors thereof; pharmaceutically-acceptable salts thereof, the use in therapy and pharmaceutical compns. and methods of treatment using the same are disclosed. For I: R1 = CN, CF3, OCF3, OCHE2, halogen, C2-4alkenyl, C2-4alknyl, Ra, Rb, SRa, NRaRb, CH2NRaRb, ORa or CH2ORa, where Ra and Rb = H, C1-6-alkyl, C(O)Rc, C(O)NHRc or COZec, where Rc = C1-6alkyl; or, Ra and Rb together are (CH2)jG(CH2)k or G(CH2)jG, where G is O or S, j = 1-4, and k = 0-2; m = 1-3 where at least one Rl moiety is other than H; R2 and R3 = H, C1-6alkyl or C1-

```
6alkyl substituted with C1-4alkoxy; R4 = H, CN, CF3, OCF3, OCHF2, halogen, C1-
 4alkyl, C2-4alkenyl, C2-4alkynyl, SRa, NRaRb, CH2NRaRb, ORa or CH2ORa, where
 Ra and Rb = H, C1-6alkyl, C(0)Rc, C(0)NHRc or CO2Rc where Rc = C1-6alkyl; or,
 Ra and Rb together are (CH2) jG(CH2)k or G(CH2) jG, and n is 0-3. Although the
 methods of preparation are not claimed, .apprx.80 example prepns. are
 included. For example, II was prepared from 3-cyano-1-naphthoyl chloride and
 1-methy1-4-(3,4-dichloropheny1)-4-(N- methylaminomethyl)piperidine; the 2nd
 reactant was prepared in 4 steps starting with cyclization of 3,4-
 dichlorophenylacetonitrile with N-methylbis(2-chloroethyl)amine hydrochloride
 to give 1-methyl-4-(3,4- dichlorophenyl)-4-cyanopiperidine, which was
 hydrogenated to 1-methyl-4-aminomethyl-4-(3,4-dichlorophenyl)piperidine, which
 was ethoxycarbonylated to 1-methyl-4-(3,4-dichlorophenyl)-4-
 (ethoxycarbonylaminomethyl)piperidine, which was reduced with LiAlH4 to 1-
methyl-4-(3,4-dichlorophenyl)-4-(N-methylaminomethyl)piperidine. Compds. I
 exhibit a Ki of 1-100 nM in the SERT assay and have an IC50 = 1-100 nM in the
NK1 FLIPR assav.
669068-08-0P, 1-Boc-4-(3,4-dichlorophenyl)-4-[[[(3-cyano-2-
methoxynaphth-1-y1)carbonyl]amino]methyl]piperidine 669068-09-1P
, 1-Boc-4-aminomethyl-4-(3,4-dichlorophenyl)piperidine
669068-15-9P, 1-Boc-4-(4-chlorophenyl)-4-[[[(3-cyano-2-
methoxynaphth-1-yl)carbonyl]amino]methyl]piperidine 669068-16-0F
, 1-Boc-4-aminomethyl-4-(4-chlorophenyl)piperidine 669068-23-9F,
1-Boc-4-(3,4-dichloropheny1)-4-[[[(3-cyano-2,4-dimethoxynaphth-1-
yl)carbonyl]amino]methyl]piperidine 669068-27-3P,
1-Boc-4-(3,4-dichlorophenyl)-4-[[[(3-cyano-2-ethylnaphth-1-
v1)carbonv1]amino]methv1]piperidine 669068-73-9P.
1-Boc-4-(4-fluorophenyl)-4-[[[(3-cyanonaphth-1-
v1)carbonv1]amino]methv1]piperidine 669068-74-0P.
1-Boc-4-aminomethyl-4-(4-fluorophenyl)piperidine 669068-77-3P,
1-Boc-4-(4-fluorophenyl)-4-[[[(3-cyanonaphth-1-
vl)carbonyl](methyl)amino]methyl]piperidine 669068-82-0F,
1-Boc-4-(4-fluorophenyl)-4-[[[(3-cyano-2-ethylnaphth-1-
vl)carbonyl]amino]methyl]piperidine
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
   (preparation of N-piperidinylmethyl naphthamide derivs. as NK1 receptor
   antagonists and serotonin reuptake inhibitors and their therapeutic
   uses)
669068-08-0 CAPLUS
```

1-Piperidinecarboxylic acid, 4-[[[(3-cyano-2-methoxy-1-naphthalenyl)carbonyl]amino]methyl]-4-(3,4-dichlorophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

ΤТ

RN

CN

- RN 669068-09-1 CAPLUS
- CN 1-Piperidinecarboxylic acid, 4-(aminomethyl)-4-(3,4-dichlorophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

- RN 669068-15-9 CAPLUS
 - CN 1-Piperidinecarboxylic acid, 4-(4-chlorophenyl)-4-[[(3-cyano-2-methoxy-1-naphthalenyl)carbonyl]amino]methyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

- RN 669068-16-0 CAPLUS
- CN 1-Piperidinecarboxylic acid, 4-(aminomethyl)-4-(4-chlorophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

- RN 669068-23-9 CAPLUS
- CN 1-Piperidinecarboxylic acid, 4-[[[(3-cyano-2,4-dimethoxy-1-naphthalenyl)carbonyl]amino]methyl]-4-(3,4-dichlorophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 669068-27-3 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[(3-cyano-2-ethyl-1naphthalenyl)carbonyl]amino]methyl]-4-(3,4-dichlorophenyl)-,
1,1-dimethylethyl ester (CA INDEX NAME)

RN 669068-73-9 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[(3-cyano-1-naphthalenyl)carbonyl]amino]methyl]-4-(4-fluorophenyl)-, 1,1-dimethylethylester (CA INDEX NAME)

- RN 669068-74-0 CAPLUS
- CN 1-Piperidinecarboxylic acid, 4-(aminomethyl)-4-(4-fluorophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

- RN 669068-77-3 CAPLUS
- CN 1-Piperidinecarboxylic acid, 4-[[[(3-cyano-1-naphthalenyl)carbonyl]methyla mino]methyl]-4-(4-fluorophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

- RN 669068-82-0 CAPLUS
- CN 1-Piperidinecarboxylic acid, 4-[[[(3-cyano-2-ethyl-1naphthalenyl)carbonyl]amino]methyl]-4-(4-fluorophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

REFERENCE COUNT:

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 15 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1951:38847 CAPLUS

DOCUMENT NUMBER: 45:38847
ORIGINAL REFERENCE NO.: 45:6664c-q

TITLE: 4-Aryl-4-aminomethylpiperidines

INVENTOR(S): Kwartler, Charles E.; Lucas, Philip

DATE

PATENT ASSIGNEE(S): Sterling Drug Inc.

DOCUMENT TYPE: Patent
LANGUAGE: Unavailable

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND

| US 2538107 | | 19510116 | US 1946-6 | 87216 | | 194 | 60730 |
|---------------|------------|--------------|-------------|---------|-------|-----|-----------|
| N-Substituted | 4-aryl-4-(| aminomethyl) | piperidines | possess | value | as | analgesic |

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS

APPLICATION NO.

DATE

AB antispasmodics, and sedatives. 4-Cyano-4-phenylpiperidine 55 g. in 400 ml. 15% NH3 in MeOH with 500 lb. H and 20 g. Raney Ni 14 hrs. gave, on vacuum distillation of the filtrate, 47 q. 4-phenyl-4- (aminomethyl)piperidine (I), b4 154° (d1-HC1 salt, m. 252-4°), also obtained by hydrogenolysis of the 1-benzyl derivative (II) of I over Pd sponge. From II 30 g. and H2NCONHNO2 14.4 g. in 450 cc. H2O at 90° was obtained on filtration 19 g. 1-benzyl-4-phenyl-4ureidomethylpiperidine, m. 172-3° (from aqueous Me2CO), converted by hydrogenolysis to 4-phenyl-4-(ureidomethyl)piperidine (III), m. 186-7° (from H2O). Similarly 7.3 g. 1-Me derivative of I, b12.5 170-2° (di-HCl salt, m. 287-8°), gave 7 g. 1-Me derivative of III, m. 200-1°, and 11.2 g. I gave 1carbamyl derivative of III, 11 g., m. 205-6°. II 14 and MeSC(:NH)NH2.H2SO4 7 q. in 50 ml. H2O 15 hrs. at room temperature, then 1 hr. at 100°, gave PhCH2N(C2H4)2CPhCH2NHrC(:NH)NH2.0.5H2SO4, m. 122-5° (from H2O); drying at 100° converted it to a vitreous solid, m. about 150°, which analyzed satisfactorily for the above formula. From I 2.8 g. was obtained 3.5 g. H2NC(:NH)-N(C2H4)2CPhCH2NHC(:NH)NH2.H2SO4, m. 363-5° (decomposition). Reaction of the aminomethyl compds, with alkyl chloroformates gave the following 4phenylpiperidines: 1,4-Me(EtOCONHCH2), m. 86-8° 1,4-PhCH2(EtOCONH CH2) HCl salt, m. 233-5°; 1,4-PhCH2(MeOCONHCH2) HCl salt, m. 211° (decomposition); 1,4-PhCH2(ProCoNHCH2) HCl salt, m. 211-3° (decomposition); 1,4-PhCH2(BuOCONHCH2) HCl salt, m. 208-9° (pH 5.5 for 1% solution); 1,4-PhCH2(iso-BuOCONHCH2) HCl salt, 227° (pH 6); 1,4-PhCH2(AmOCONHCH2) HCl salt, 205-6° (pH 5.7 for 0.5%

solution); and 1.4-PhCH2(C6H13OCONHCH2) HCl salt, m. 193-4°. The pH of a 1% aqueous solution of PhCH2N(C2H4)2-CPhCH2NHAc.HCl, m. 271-3°, was 5.8. Cf. C.A. 45, 669q.

IT 2/3396-12-4P, 1-Piperidinecarboxamide, 4-phenyl-4-ureidomethyl-RL: PREP (Preparation)

(preparation of) RN 873396-12-4 CAPLUS

CN 1-Piperidinecarboxamide, 4-[[(aminocarbonyl)amino]methyl]-4-phenyl- (CA INDEX NAME)

$$\underset{\text{H}_2\text{N}}{\overset{\circ}{\bigcup}} = \underset{\text{Ph}}{\overset{\circ}{\bigcup}} = \underset{\text{Ph}}{\overset{\overset{\circ}{\bigcup}} = \underset{\text{Ph}}{\overset{\circ}{\bigcup}} = \underset{\text{Ph}}{\overset{\overset{\circ}{\bigcup}} = \underset{\text{Ph}}{\overset{\overset{\circ}{\bigcup}} = \underset{\text{Ph}}{\overset{\overset{\circ}{\bigcup}} = \underset{\text{Ph}}{\overset{\overset{\circ}{\bigcup}} = \underset{\text{Ph}}{\overset{\overset{\circ}{\bigcup}} = \underset{\text{Ph}}{\overset{\overset{\overset{\circ}{\bigcup}} = \underset{\text{Ph}}{\overset{\overset{\overset{\circ}{\bigcup}} = \underset{\text{Ph}}{\overset{\overset{\overset{\circ}{\bigcup$$

L3 ANSWER 16 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1951:3762 CAPLUS DOCUMENT NUMBER: 45:3762

ORIGINAL REFERENCE NO.: 45:669q-i

TITLE: 4-Aryl-4-aminomethylpiperidines PATENT ASSIGNEE(S): Sterling Drug Inc.

DOCUMENT TYPE:

Patent Unavailable LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

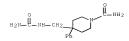
PATENT NO. KIND DATE APPLICATION NO. DATE GB 640168 19500712

AR 4-Cyano-4-phenylpiperidine and H (Ni) form the 4-aminomethyl compound (I), b4 154° (di-HCl salt, m. 252-4°). The 1-Me derivative (II) of I, b12.5 170-2° (di-HCl salt, m. 287-8°), is prepared similarly. II and H2NCONHNO2 (III) form 1-methyl-4-phenyl-4- (ureidomethyl)piperidine (IV), m. 200-1°. I and III form the 1-H2NCO analog of IV, m. 205°. 1-PhCH2 analog (V) of IV, m. 172-3°. V and H (Pd) form 4-phenyl-4-(ureidomethyl)piperidine, m. 186-7°. Acylation of II with Et02CC1 forms the N-Et02C derivative, m. 86-8°. 1-Benzyl-4-phenyl-4-(aminomethyl)piperidine and chloroformates or acyl chlorides form the HCl salts of the following N-carbalkoxy and acyl derivs. (N-substituent, m.p., and pH of solution given): MeO2C, 211°; EtO2C, 233-5°; PrO2C, 221-3°; BuO2C, 208-9°, 5.5 in 1% solution; iso-BuO2C, 227°, 6 in 1% solution; AmO2C, 205-6°, 5.7 in 0.5% solution; C6H11O2C, 193-4°; Ac, 271-3°, 5.8 in 1% solution

873396-12-4P, 1-Piperidinecarboxamide, 4-phenyl-4-ureidomethyl-RL: PREP (Preparation)

(preparation of) 873396-12-4 CAPLUS RM

CN 1-Piperidinecarboxamide, 4-[[(aminocarbonvl)amino]methvl]-4-phenvl- (CA INDEX NAME)



L3 ANSWER 17 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1948:5791 CAPLUS Full-text

DOCUMENT NUMBER: 42:5791

42:1270f-i,1271a-d ORIGINAL REFERENCE NO.:

Preparation of substituted 4-(aminomethyl)piperidines

and their straight chain analogs

AUTHOR(S): Kwartler, Charles E.; Lucas, Philip

CORPORATE SOURCE: Sterling-Winthrop Research Inst., Rensselaer, NY

SOURCE: Journal of the American Chemical Society (1947), 69,

2582-6 CODEN: JACSAT; ISSN: 0002-7863

DOCUMENT TYPE: Journal Unavailable

LANGUAGE:

AB

The following were prepared according to Eisleb (U.S. 2,167,351, C.A. 33, 8923.1); Et γ-dimethylamino-α-phenylbutyrate, b2 108° (HCl salt, m. 115-17°); γ-diethylamino analog, b3 132-3° (HCl salt, m. 89-90°). 1-Methyl-4-cyano-4phenylpiperidine (36 g.) in 400 cc. 15% MeOH-NH3, hydrogenated 20 hrs. over 10 q. Raney Ni at room temperature/500 lb., gives 66.7% 1-methyl-4-(aminomethyl)-4-phenylpiperidine (I), b12.5 170-2° (HCl salt, m. 287-8°); 1-benzyl analog (II), b0.5 201-2° (HCl salt, m. 229-31°). 4-Cyano-4-phenylpiperidine (b2 145-6°; picrate, m. 205-6°) (55 g.) in 500 cc. 10% MeOH-NH3, hydrogenated 14 hrs. over 20 g. Raney Ni at room temperature/500 lb., gives 47 g. 4-(aminomethyl)-4-phenylpiperidine (III), b4 154° (HCl salt, m. 252-4°); III results also (83.2% yield) by hydrogenating 31 g. II in 78 cc. EtOH and 6 cc. AcOH over 0.5 q. Pd at 55°/40 lb. 4-Carbethoxy-4-phenylpiperidine b3 154-5° (HCl salt, m. 112-13°). II (30 g.) and 14.4 g. nitrourea in 450 cc. H2O, heated at 90° until gas evolution ceases, give 55% 1-benzyl-4-ureidomethyl- 4phenylpiperidine (IV), m. 172-4°; 1-Me analog m. 200-1°. III (11.2 g.) and 14 q. nitrourea in 140 cc. H2O, heated 30 min. at 70°, give 80% 1-carbamyl-4ureidomethyl-4-phenylpiperidine (V), m. 205-6° (decomposition). Hydrogenation of IV in EtOH, AcOH, and H2O over PdCl2-C at 50-60°/45 lb. gives 4 g. 4ureidomethyl-4- phenylpiperidine, m. 186-7°; with nitrourea this yields V. 1-Carbamyl-4-carbethoxy-4-phenylpiperidine, m. 119-20°. 1-Diethylamino-3-phenyl-4-ureidobutane m. 83-4°. II (14 g.), 7 g. methylisothiourea sulfate, and 50ml. H2O, stirred 15 hrs. at room temperature and heated 1 hr. on the steam bath, give 30-2% 1-benzyl-4- (quanidinomethyl)-4-phenylpiperidine sulfate, m. 150°; III gives 47% of the 1-quanyl analog (VI), m. 363-5° (decomposition); 1quanyl-4-carbethoxy-4-phenylpiperidine sulfate (VII), m. 276-7° (decomposition). I (8.16 g.) and 8.3 g. anhydrous K2CO3 in 75 ml. dioxane, treated dropwise with 4.34 g. C1CO2Et in ether and refluxed 90 min., give 45.3% 1-methyl-4-(carbethoxyaminomethyl)-4-phenylpiperidine, m. 86-8°. 2-Phenyl-4-(diethylaminobutyl)guanidine-HI, with 1 mol. H2O, m. 91-3°; pchlorophenyl analog m. 93-5°; 3,4-dichlorophenyl analog, with 1 mol. H2O, m. 122-3°. II (22.4 g.) in 100 ml. C5H5N, treated dropwise with 8.68 g. C1CO2Et in ether, kept 16 hrs. at room temperature, and heated 1 hr. at 60°, gives 71% 1-benzyl-4-(carbethoxyaminomethyl)-4-phenylpiperidine-HC1 (VIII), m. 232-3° (decomposition); Me ester m. 210.6-11.2° (decomposition); Pr ester m. 219-27° (decomposition); Bu ester m. 208-8.8°; iso-Bu ester m. 226.6-7.4°; hexyl ester m. 193-4°. The majority of these compds. show mild spasmolytic action and

neg, analgesic action. The effect against acetylcholine spasms of the isolated rabbit ileum was negligible in all cases. Against BaCl2-induced spasms, VII was approx. 2.5 times as active as papaverine; the remaining compds. were less active. 1-Guanidino-2-phenyl-4-diethylaminobutane sulfate, VI, and VIII were of the same order of activity as papaverine against BaCl2-induced spasms of the isolated virgin guinea pig uterus; all the other compds. studied were less active.

- IIT 873396-12-4P, Urea, [(1-carbamoy1-4-pheny1-4-piperidy1)methy1]RL: PREP (Preparation)
- (preparation of) RN 873396-12-4 CAPLUS
- CN 1-Piperidinecarboxamide, 4-[[(aminocarbonyl)amino]methyl]-4-phenyl- (CA INDEX NAME)

$$\text{H}_2\text{N} - \overset{\circ}{\text{U}}_{-\text{NH}-\text{CH}_2} - \text{NH}_2$$

| => file marpat
COST IN U.S. DOLLARS | SINCE FILE
ENTRY | TOTAL |
|--|---------------------|------------------|
| FULL ESTIMATED COST | 93.13 | 272.64 |
| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE
ENTRY | TOTAL
SESSION |
| CA SUBSCRIBER PRICE | -13.60 | -13.60 |

FILE 'MARPAT' ENTERED AT 07:56:52 ON 10 JUL 2008 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2008 American Chemical Society (ACS)

FILE CONTENT: 1961-PRESENT VOL 148 ISS 25 (20080704/ED)

SOME MARPAT RECORDS ARE DERIVED FROM INPI DATA FOR 1961-1987

MOST RECENT CITATIONS FOR PATENTS FROM MAJOR ISSUING AGENCIES (COVERAGE TO THESE DATES IS NOT COMPLETE):

US 20080119550 22 MAY 2008 DE 102007054884 21 MAY 2008 EP 1925256 28 MAY 2008 MO 2008817905 22 MAY 2008 MO 200861874 29 MAY 2008 FR 2908651 23 MAY 2008 RU 2324697 20 MAY 2008 CA 2608608 30 APR 2008

Expanded G-group definition display now available.

Effective December 15th the iteration and answer limits in MARPAT

have increased from 100,000 to 200,000 for both on-line and batch searches. For more information on MARPAT search limits, type HELP SLIMITS at an arrow prompt.

=> s L1 SSS full

FULL SEARCH INITIATED 07:56:57 FILE 'MARPAT'

FULL SCREEN SEARCH COMPLETED - 42375 TO ITERATE

73.8% PROCESSED 31270 ITERATIONS 39 ANSWERS

98.7% PROCESSED 41824 ITERATIONS 59 ANSWERS

99.3% PROCESSED 42083 ITERATIONS 60 ANSWERS

100.0% PROCESSED 42375 ITERATIONS 60 ANSWERS

SEARCH TIME: 00.00.55

L4 60 SEA SSS FUL L1

=> file caplus

 COST IN U.S. DOLLARS
 SINCE FILE ENTRY
 TOTAL ENTRY

 FULL ESTIMATED COST
 125.72
 398.36

| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE | TOTAL | ENTRY | SESSION | CA SUBSCRIBER PRICE | 0.00 | -13.60

CA SUBSCRIBER PRICE 0.00 -13

FILE 'CAPLUS' ENTERED AT 07:57:57 ON 10 JUL 2008 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 10 Jul 2008 VOL 149 ISS 2 FILE LAST UPDATED: 9 Jul 2008 (20080709/ED)

Caplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2008.

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

http://www.cas.org/legal/infopolicy.html

=> s L4 SSS full L5 60 L4

=> d ibib abs hitstr 1-

YOU HAVE REQUESTED DATA FROM 60 ANSWERS - CONTINUE? Y/(N):y

L5 ANSWER 1 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2008:412119 CAPLUS Fuil-text

DOCUMENT NUMBER: 148:403086

TITLE: Preparation of piperidine derivatives as

melanocortin-4 receptor modulators
INVENTOR(S): Bakshi, Raman K.; Dellureficio, James P.; Hong,

Oingmei; Jian, Tianying; Liu, Jian; Nargund, Ravi P.;

Ye, Zhixiong

PATENT ASSIGNEE(S): Merck & Co., Inc., USA

SOURCE: PCT Int. Appl., 141pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

| | ENT I | | | | KIN | D | DATE | | | APPL | | | NO. | | D. | ATE | |
|------|-------|------|------|-----|-----|-----|------|------|-----|------|------|------|-----|-----|-----|------|-----|
| | | 0394 | | | A2 | - | 2008 | 0403 | 1 | WO 2 | | US20 | | | 2 | 0070 | 924 |
| | W: | ΑE, | AG, | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BH, | BR, | BW, | BY, | BZ, | CA, |
| | | CH, | CN, | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DO, | DZ, | EC, | EE, | EG, | ES, | FI, |
| | | GB, | GD, | GE, | GH, | GM, | GT, | HN, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, |
| | | KM, | KN, | KΡ, | KR, | ΚZ, | LA, | LC, | LK, | LR, | LS, | LT, | LU, | LY, | MA, | MD, | ME, |
| | | MG, | MK, | MN, | MW, | MX, | MY, | ΜZ, | NA, | NG, | NI, | NO, | NZ, | OM, | PG, | PH, | PL, |
| | | PT, | RO, | RS, | RU, | SC, | SD, | SE, | SG, | SK, | SL, | SM, | SV, | SY, | TJ, | TM, | TN, |
| | | TR, | TT, | TZ, | UA, | UG, | US, | UZ, | VC, | VN, | ZA, | ZM, | ZW | | | | |
| | RW: | AT, | BE, | BG, | CH, | CY, | CZ, | DE, | DK, | EE, | ES, | FI, | FR, | GB, | GR, | HU, | ΙE, |
| | | IS, | IT, | LT, | LU, | LV, | MC, | MT, | NL, | PL, | PT, | RO, | SE, | SI, | SK, | TR, | BF, |
| | | ΒJ, | CF, | CG, | CI, | CM, | GA, | GN, | GQ, | GW, | ML, | MR, | NE, | SN, | TD, | TG, | BW, |
| | | GH, | GM, | KE, | LS, | MW, | MZ, | NA, | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW, | AM, | ΑZ, |
| | | BY, | KG, | ΚZ, | MD, | RU, | ΤJ, | TM | | | | | | | | | |
| YTTS | APP | LNI. | INFO | | | | | | 1 | IS 2 | 006- | 8474 | 94P | 1 | P 2 | 0060 | 927 |

PRIORITY APPLN. INFO.: US 2006-847494P
OTHER SOURCE(S): MARPAT 148:403086

ĠΙ

AB The title compds. with general formula I [wherein X = alkyl, -(CH2)n-cycloalkyl, (un)substituted -(CH2)n-Ph, -(CH2)n-naphthyl, etc.; Y = H, alkyl, alkenyl, -(CH2)n-cycloalkyl, etc.; Z = CH or N; Rl = (un)substituted -(CH2)n-heterocycloalkyl, -(CH2)n-(bridged heterocycloalkyl), or -N(RT)-

heterocycloalkyl, where R7 = H or alkyl; R2 = (un)substituted Ph, naphthyl, or heteroaryl; R3 = independently H, OH, halo, CF3, etc.; n = 0-41; p = 1-2; q = 0-2] or pharmaceutically acceptable salts thereof were prepared as ligands of the human melanocortin-4 receptors, in particular, selective ligands of the human melanocortin-4 receptor (MC-4R). I are useful for the treatment, control, or prevention of diseases and disorders responsive to the modulation of MC-4R, such as obesity, diabetes, nicotine addiction, alcoholism, sexual dysfunction, including erectile dysfunction and female sexual dysfunction. Example compound II was prepared by a multi-step synthesis (procedure given). The tested compds. were found to bind to MC-4R with IC50 values of less than 10 μ

L5 ANSWER 2 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2008:12259 CAPLUS Full-text

DOCUMENT NUMBER: 148:144652

TITLE: Preparation of substituted piperidines that increase

p53 activity and the uses thereof

INVENTOR(S):

Ma, Yao; Lahue, Brian Robert; Shipps, Gerald W.; Wang,
Yaolin; Bogen, Stephane L.; Voss, Matthew Ernst; Nair,
Latha G.; Tian, Yuan; Doll, Ronald J.; Guo, Zhuyan;
Strickland, Corev O.; Zhand, Rumin; McCov, Mark A.;

Pan, Weidong; Siegel, Elise M.; Gibeau, Craig R. PATENT ASSIGNEE(S): Schering Corporation, USA

SOURCE: U.S. Pat. Appl. Publ., 199pp.
CODEN: USXXCO

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| | ENT | | | | KIN | D | DATE | | | | ICAT | | | | D. | ATE | |
|-------|------|------|------|-----|-----|-----|------|------|-----|------|------|------|-----|-----|-----|------|-----|
| | 2008 | | | | 3.1 | _ | 2000 | 0102 | | | 007 | | | | | 0070 | |
| | | | | | | | | | | | | | | | | | |
| WO | 2008 | 0052 | 68 | | A1 | | 2008 | 0110 | | WO 2 | 007- | US14 | 958 | | 2 | 0070 | 627 |
| | W: | ΑE, | AG, | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BH, | BR, | BW, | BY, | BZ, | CA, |
| | | CH, | CN, | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DO, | DZ, | EC, | EE, | EG, | ES, | FI, |
| | | GB, | GD, | GE, | GH, | GM, | GT, | HN, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, |
| | | KM, | KN, | KP, | KR, | KZ, | LA, | LC, | LK, | LR, | LS, | LT, | LU, | LY, | MA, | MD, | ME, |
| | | MG, | MK, | MN, | MW, | MX, | MY, | MZ, | NA, | NG, | NI, | NO, | NZ, | OM, | PG, | PH, | PL, |
| | | PT, | RO, | RS, | RU, | SC, | ŞD, | SE, | SG, | SK, | SL, | SM, | SV, | SY, | ΤJ, | TM, | TN, |
| | | TR, | TT, | TZ, | UA, | UG, | US, | UZ, | VC, | VN, | ZA, | ZM, | ZW | | | | |
| | RW: | ΑT, | BE, | BG, | CH, | CY, | CZ, | DE, | DK, | EE, | ES, | FI, | FR, | GB, | GR, | HU, | ΙE, |
| | | IS, | IT, | LT, | LU, | LV, | MC, | MT, | NL, | PL, | PT, | RO, | SE, | SI, | SK, | TR, | BF, |
| | | ВJ, | CF, | CG, | CI, | CM, | GA, | GN, | GQ, | GW, | ML, | MR, | NE, | SN, | TD, | TG, | BW, |
| | | GH, | GM, | KE, | LS, | MW, | MZ, | NA, | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW, | AM, | AZ, |
| | | BY, | KG, | KZ, | MD, | RU, | TJ, | TM | | | | | | | | | |
| ORITY | APP | LN. | INFO | . : | | | | | | US 2 | 006- | 8177 | 53P | | P 2 | 0060 | 630 |

PRIORITY APPLN. INFO.: US 2006-817753P P 20060630 OTHER SOURCE(S): MARPAT 148:144652 GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. I [R1 = (un)substituted heterocyclyl, heterocyclenyl, heteroaryl, etc.; A = 0, S, CO, (un)substituted CH2, etc.; m = 0-2; R2 = (un)substituted aryl, heteroaryl, cyclyl, etc.; R3 = COX, SO2X, OX, etc., where in X = (un)substituted aryl, heteroaryl, heterocyclyl, etc.; R4 and R4a

independently = H, alkyl, alkenyl, etc.; or R4 and R1 together form (un) substituted heterocyclyl or heterocyclenyl; or R4 and R4a or R5 and R5a or R6 and R6a or R7 and R7a together with the atom they are attached to form an (un) substituted spirocycle; R5, R5a, R7 or R7a independently = H, alkyl, alkoxy, etc.; R6 and R6a independently = H, alkyl, trihaloalkyl, etc.; R6 and R7, R6 and R6a or R5 and R7 together with the carbon each is attached to form cycloalkyl, cyclenyl, heterocyclyl, or heterocyclenyl], and their pharmaceutically acceptable salts, are prepared and disclosed as modulators of p53 activity. Thus, e.g., II was prepared by amidation of III (preparation given) with N-(2-piperazinvlphenyl)-2-methoxyethanamide (preparation given) followed by demethylation. Compds. of the present application exhibit FP IC50, FP Ki, and Cell Viability CO50 values of less than about 50.0 μM. Select HDM2 inhibitory activities are given. In its many embodiments, the present invention discloses I as inhibitors of HDM2 protein, methods for preparing such compds., pharmaceutical compns. including one or more such compds., methods of treatment, prevention, inhibition, of one or more diseases associated with the HDM2 protein or P53 using such compds. or pharmaceutical compns.

L5 ANSWER 3 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2007:1175911 CAPLUS Full-text

DOCUMENT NUMBER: 147:450505

TITLE: Dispersion adjuvant for metal nanoparticles and metal nanoink comprising the dispersed metal nanoparticles
INVENTOR(S): Kim, Sang Ho; Lee, Jong Taik; Kim, Min Seo; Heo, Soo

Yeon

PATENT ASSIGNEE(S): Lg Chem, Ltd., S. Korea SOURCE: U.S. Pat. Appl. Publ., 7pp.

CODEN: USXXCO
DOCUMENT TYPE: Patent

LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|----------|
| | | | | |
| US 20070244220 | A1 | 20071018 | US 2007-783741 | 20070411 |
| KR 2007101775 | A | 20071017 | KR 2007-34671 | 20070409 |
| PRIORITY APPLN. INFO.: | | | KR 2006-33207 A | 20060412 |

OTHER SOURCE(S): MARPAT 147:450505

3 A dispersion adjuvant for metal nanoparticles is an amide derivative The dispersion adjuvant helps metal nanoparticles to be dispersed in a solvent in the presence of a dispersant, inhibits metal particles from agglomerating among themselves, and increases the content of metal nanoparticles in nonag. solvent. Addnl., interconnection lines formed by using the nanoink have an increased content of metal per unit area, and provide improved conductivity

L5 ANSWER 4 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2007:999518 CAPLUS Full-text

DOCUMENT NUMBER: 147:344112

TITLE: Preparation of aryl sulfonyl heterocycles as

bradykinin receptor modulators
INVENTOR(S): Peterson, John M.; Li, Guiying; Ihle, David C.;

Hodgetts, Kevin J.; Guo, Qin; Ge, Ping; Hutchison,

Alan J.

PATENT ASSIGNEE(S): Neurogen Corporation, USA

SOURCE: PCT Int. Appl., 113pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. WO 2007101007 A2 20070907 WO 2007-US62406 20070220 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM PRIORITY APPLN. INFO.: US 2006-776145P P 20060223 MARPAT 147:344112 OTHER SOURCE(S):

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

chosen from halo, OH, CN, alkyl, etc.; R2 = oxo, OH, and alkyl; R3 = H, alkyl or alkanoyl; R4 = H, alkyl, alkenyl, etc.; R5 = alkyl, alkenyl, alkyl ether, etc.], and their pharmaceutically acceptable salts, are prepared and disclosed as capable of modulating bradykinin receptors. Thus, e.g., II was prepared by deprotection of N-BOC-morpholine-3-carboxylic acid, sulfonylation with 2,6-dimethyl-4-methoxyphenyleulfonyl chloride, reduction, O-alkylation with tert-butylbromoaceate, hydrolysis, and amidation with 4-(3-(dimethylamino)propyl)piperazine. Bioassays are described for evaluating activity of I (no data). I may be used to modulate bradykinin receptor activity in vivo or in vitro, and are particularly useful in the treatment of conditions responsive to B1 modulation in humans, domesticated companion animals and livestock animals, including inflammation and pain. Pharmaceutical compans. and methods for using them to treat such disorders are provided, as are methods for using such ligands for receptor localization studies and various in vitro assays.

Title compds. I [n=0 or 1, if n=0, then m=1 and q=0 or 1, if n=1, then either (i) m=1 and q=1 or or 2 or (ii) q=1 and m=1 or 2; X=0, S., SO, SO2, or NR3; Y=-OCH2-, -(CH2)2-, -CH=CH-, etc.; R1=0-5 substituents

L5 ANSWER 5 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2007:464460 CAPLUS Full-text

DOCUMENT NUMBER: 146:462284

TITLE: Preparation of pyrazolo[1,5-a]pyrimidine-3-

carboxamides as casein kinase II (CK2) modulators for the treatment of cancer

NVENTOR(S): Rice, Kenneth D.; Bussenius, Joerg; Costanzo, Simona;

Kennedy, Abigail R.; Kim, Angie Inyoung; Manalo,

Jean-Claire Limun; Peto, Csaba J. T ASSIGNEE(S): Exelixis, Inc., USA

PATENT ASSIGNEE(S): Exelixis, Inc., USA SOURCE: PCT Int. Appl., 99pp. CODEN: PIXXD2 Patent

DOCUMENT TYPE: LANGUAGE: English FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

| | ENT : | | | | KIN | D | DATE | | | APPL | ICAT | ION I | NO. | | | | |
|----------|-------|------|------|-----|-----|-----|------|-------|-----|------|------|-------|-----|------|-----|------|-----|
| WO : | 2007 | 0480 | 66 | | A2 | | 2007 | | | WO 2 | 006- | US41 | 506 | | | 0061 | |
| wo . | | | | | | | AU, | | RΔ | BB | B.G | BB | ВW | BY | B7. | CA | CH |
| | | | | | | | DE, | | | | | | | | | | |
| | | | | | | | HR, | | | | | | | | | | |
| | | | | | | | LK, | | | | | | | | | | |
| | | | | | | | NA, | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | SG, | | | | | 51, | IJ, | IPI, | IN, | IK, | 11, |
| | | | | | | | VC, | | | | | | | | | | |
| | RW: | | | | | | CZ, | | | | | | | | | | |
| | | IS, | IT, | LT, | LU, | LV, | MC, | NL, | PL, | PT, | RO, | SE, | SI, | SK, | TR, | BF, | ВJ, |
| | | CF, | CG, | CI, | CM, | GA, | GN, | GQ, | GW, | ML, | MR, | NE, | SN, | TD, | TG, | BW, | GH, |
| | | GM, | KE, | LS, | MW, | MZ, | NA, | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW, | AM, | AZ, | BY, |
| | | KG. | KZ. | MD. | RU. | TJ. | TM, | AP. | EA. | EP. | OA | | | | | | |
| AU : | 2006 | | | | | | 2007 | | | | | 3048 | 75 | | 2 | 0061 | 023 |
| PRIORITY | APP | LN. | INFO | . : | | | | | | US 2 | 005- | 7293 | 48P | 1 | P 2 | 0051 | 021 |
| | | | | | | | | | | WO 2 | | | | | v 2 | 0061 | 023 |
| OTHER SO | URCE | (S): | | | MAR | PAT | 146: | 46221 | | | | | | | | | |

Title compound I [wherein R1 = OH, alkoxy or arylalkylamino; R2 = alkyl, AB (un) substituted (hetero) aryl or heterocycloalkyl; R6 = H or alkyl; R7 = H, alkylamino or dialkylamino; Z = aryloxy, cycloalkyloxy, amino, etc., with limitations] or pharmaceutically acceptable salts thereof were prepared as casein kinase II (CK2) modulators. For instance, cyclization of Et 5-amino-1H-pyrazole-4-carboxylate with Et 3-oxo-3-phenylpropanoate followed by ester hydrolysis of the resultant pyrazolo[1,5-a]pyrimidine-3- carboxylate and subsequent coupling with 1-Phenylpiperazine led to pyrazolopyrimidine carboxamide II. I showed CK2 inhibitory activity with IC50 values of less than 5000 nM. The invented compds, and their pharmaceutical compns, are useful for the treatment of diseases that involve CK2, such as cancer.

ACCESSION NUMBER: DOCUMENT NUMBER: TITLE:

L5 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN 2007:439604 CAPLUS Full-text

146:421851

Preparation of piperidine derivatives as antagonists of CCR1 receptor

Zhang, Penglie; Pennell, Andrew M. K.; Chen, Wei; INVENTOR(S): Greenman, Kevin Lloyd; Li, Lianfa; Sullivan, Edward J.

PATENT ASSIGNEE(S): Chemocentryx, Inc., USA

SOURCE: PCT Int. Appl., 86pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PA: | TENT I | .OV | | | KIN | D | DATE | | | APPI | ICAT | ION | NO. | | D | ATE | |
|----------|--------|------|------|-----|-----|-----|------|------|-----|------|--------|------|-----|-----|-----|------|-----|
| | | | | | | - | | | | | | | | | | | |
| WO | 2007 | 0448 | 04 | | A2 | | 2007 | 0419 | | WO 2 | 2006-1 | JS39 | 713 | | 2 | 0061 | 011 |
| | W: | ΑE, | AG, | AL, | AM, | ΑT, | AU, | ΑZ, | BA, | BB, | BG, | BR, | BW, | ΒY, | ΒZ, | CA, | CH, |
| | | CN, | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | EG, | ES, | FΙ, | GB, | GD, |
| | | GE, | GH, | GM, | HN, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | KM, | KN, | KP, |
| | | KR, | KZ, | LA, | LC, | LK, | LR, | LS, | LT, | LU, | LV, | LY, | MA, | MD, | MG, | MK, | MN, |
| | | MW, | MX, | MY, | MZ, | NA, | NG, | NI, | NO, | NZ, | OM, | PG, | PH, | PL, | PT, | RO, | RS, |
| | | RU, | SC, | SD, | SE, | SG, | SK, | SL, | SM, | SV, | SY, | TJ, | TM, | TN, | TR, | TT, | TZ, |
| | | UA, | UG, | US, | UZ, | VC, | VN, | ZA, | ZM, | zw | | | | | | | |
| | RW: | ΑT, | BE, | BG, | CH, | CY, | CZ, | DE, | DK, | EE, | ES, | FΙ, | FR, | GB, | GR, | HU, | IE, |
| | | IS, | IT, | LT, | LU, | LV, | MC, | NL, | PL, | PT, | RO, | SE, | SI, | SK, | TR, | BF, | ВJ, |
| | | CF, | CG, | CI, | CM, | GA, | GN, | GQ, | GW, | ML, | MR, | NE, | SN, | TD, | TG, | BW, | GH, |
| | | GM, | KE, | LS, | MW, | ΜZ, | NA, | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW, | AM, | ΑZ, | BY, |
| | | KG, | ΚZ, | MD, | RU, | ΤJ, | TM | | | | | | | | | | |
| US | 2007 | 0088 | 036 | | A1 | | 2007 | 0419 | | US 2 | 2006- | 5469 | 38 | | 2 | 0061 | 011 |
| US | 2007 | 0093 | 467 | | A1 | | 2007 | 0426 | | US 2 | 2006- | 5802 | 02 | | 2 | 0061 | 011 |
| PRIORITY | APP: | LN. | INFO | . : | | | | | | US 2 | 2005- | 7259 | 80P | 1 | P 2 | 0051 | 011 |
| OTHER SO | DURCE | (S): | | | MAR | PAT | 146: | 4218 | 51 | | | | | | | | |

Title compds. I [R1 = cycloalkyl, (un)substituted alkyl, haloalkyl, etc.; any AB two R1 attached to the same or different carbon atoms may join together to form a 3- to 7-membered ring; m = 0-4; R2-6 independently = H, halo, CN, NO2, etc.; A = H, aryl, heteroaryl, etc.; B = (un)substituted aryl or heteroaryl; L1 = (un) substituted alkylene or heteroalkylene], and their pharmaceutically acceptable salts, are prepared and disclosed as antagonists of CCR1 receptor. Thus, e.g., II was prepared via heterocyclization of 4-chlorobenzyl cyanide with bis(2-chloroethy1)amine followed by acylation with (4-chloro-5-methy1-3trifluoromethylpyrazol-1- yl)acetic acid. Select compds. were evaluated for

their inhibitory activity in CCR1 ligand binding assay or chemotaxis assay, e.g., II demonstrated IC50 value of < 1000 nM.

L5 ANSWER 7 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2007:409620 CAPLUS Full-text

DOCUMENT NUMBER: 146:421983

TITLE: Preparation of 1H-benzimidazole-4-carboxamides as

poly(ADP-ribose)polymerase (PARP) inhibitors for the treatment of inflammation, sepsis and septic shock Penning, Thomas D.; Thomas, Sheela A.; Zhu, Gui-Dong;

INVENTOR(S): Penning, Thomas D.; Thomas, Sheela A.; Zhu, Gui-Gandhi, Virajkumar B.; Gong, Jianchun; Giranda,

Vincent L.

PATENT ASSIGNEE(S): Abbott Laboratories, USA

SOURCE: PCT Int. Appl., 85pp.

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

GΙ

| PA: | KIND DATE | | | | | APPL | ICAT | DATE | | | | | | | | | | |
|------------------------|---------------|-----|-----|-------------|-----|-----------------|------|-----------------|-----|----------------|------|------|-----|----------|------|------|-----|--|
| WO | TO 2007041357 | | | A1 20070412 | | | 0412 | WO 2006-US38169 | | | | | | 20060928 | | | | |
| | W: | ΑE, | AG, | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BR, | BW, | BY, | BZ, | CA, | CH, | |
| | | CN, | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | EG, | ES, | FI, | GB, | GD, | |
| | | GE, | GH, | GM, | HN, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | KM, | KN, | KP, | |
| | | KR, | KZ, | LA, | LC, | LK, | LR, | LS, | LT, | LU, | LV, | LY, | MA, | MD, | MG, | MK, | MN, | |
| | | MW, | MX, | MY, | MZ, | NA, | NG, | NI, | NO, | NZ, | OM, | PG, | PH, | PL, | PT, | RO, | RS, | |
| | | RU, | SC, | SD, | SE, | SG, | SK, | SL, | SM, | SV, | SY, | TJ, | TM, | TN, | TR, | TT, | TZ, | |
| | | UA, | UG, | US, | UZ, | VC, | VN, | ZA, | ZM, | zw | | | | | | | | |
| | RW: | AT, | BE, | BG, | CH, | CY, | CZ, | DE, | DK, | EE, | ES, | FI, | FR, | GB, | GR, | HU, | IE, | |
| | | IS, | IT, | LT, | LU, | LV, | MC, | NL, | PL, | PT, | RO, | SE, | SI, | SK, | TR, | BF, | ВJ, | |
| | | CF, | CG, | CI, | CM, | GA, | GN, | GQ, | GW, | ML, | MR, | NE, | SN, | TD, | TG, | BW, | GH, | |
| | | GM, | KE, | LS, | MW, | MZ, | NA, | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW, | AM, | AZ, | BY, | |
| | | KG, | KZ, | MD, | RU, | TJ, | TM | | | | | | | | | | | |
| CA | CA 2623822 | | | | | | 2007 | 0412 | | CA 2 | 006- | 2623 | 822 | | 2 | 0060 | 928 | |
| US 20070179136 | | | | | A1 | .1 20070802 | | | | US 2006-536994 | | | | 20060929 | | | | |
| PRIORITY APPLN. INFO.: | | | | | | | | | | US 2 | 005- | 7216 | 83P | 1 | P 2 | 0050 | 929 | |
| | | | | | | | | | | WO 2 | 006- | US38 | 169 | 1 | 71 2 | 0060 | 928 | |
| OTHER SOURCE(S): | | | | | | MARPAT 146:4219 | | | | 33 | | | | | | | | |

Ι

NH₂ (R⁴) m

AB Title compds. I [wherein R1, R2, R3 = H, alkenyl, alkoxy, etc., R4 = H, halo or (halo)alkyl; m = 4; Z = bond or alkylenyl; A = (un)substituted nonarom. N-heterocyclyl, with limitations] were prepared as poly(ADP-ribose)polymerase (PARP) inhibitors. For instance, CDI-mediated amidation of tert-Bu 4-(4-carboxyphenyl)plperidine-1-carboxylate with 2,3-diaminobenzamide dihydrochloride followed by cyclocondensation/deprotection in refluxing acetic acid gave benzimidazolecarboxamide II. The invented compds. were found to be potent PARP inhibitors with Ki values in the range of nanomolar. They could penetrate cell membranes and inhibit PARP in intact cells, and potentiate the antitumor activity of cisplatin. Therefore, I are useful for treating a disease or a disorder associated with PARP, such as inflammation, sepsis and septic shock.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 8 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2007:150683 CAPLUS Full-text

DOCUMENT NUMBER: 146:206459

TITLE: Processes for preparation of pyrrolidine-containing

boronic acids and their derivatives by convergent

syntheses

INVENTOR(S): Campbell, David Alan; Winn, David T.

PATENT ASSIGNEE(S): Phenomix Corporation, USA SOURCE: PCT Int. Appl., 52pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| | | | | | KIND DATE | | | | | APPL | | | | | | | | | |
|---------|------------------------|-----|------|-----|----------------------|-----------------|--|------|----------------|------|------|----------|----------|-----|----------|-----|-----|--|--|
| | 2007016356 | | | | | | | | | | | 20060727 | | | | | | | |
| | W: AE, AG, AL, | | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BR, | BW, | BY, | BZ, | CA, | CH, | | | |
| | | CN, | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | EG, | ES, | FI, | GB, | GD, | | |
| | | GE, | GH, | GM, | HN, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | KM, | KN, | KP, | | |
| | KR, KZ, L
MW, MX, M | | LA, | LC, | LK, | LR, | LS, | LT, | LU, | LV, | LY, | MA, | MD, | MG, | MK, | MN, | | | |
| | | | MZ, | NA, | NG, | NI, | NO, | NZ, | OM, | PG, | PH, | PL, | PT, | RO, | RS, | RU, | | | |
| | | SC, | SD, | SE, | SG, | SK, | SL, | SM, | SY, | ТJ, | TM, | TN, | TR, | TT, | TZ, | UA, | UG, | | |
| | US, UZ, | | VC, | VN, | ZA, | ZM, | ZW | | | | | | | | | | | | |
| | RW: | AT, | BE, | BG, | CH, | CY, | CZ, | DE, | DK, | EE, | ES, | FI, | FR, | GB, | GR, | HU, | IE, | | |
| | | IS, | IT, | LT, | LU, | LV, | MC, | NL, | PL, | PT, | RO, | SE, | SI, | SK, | TR, | BF, | ВJ, | | |
| | | CF, | CG, | CI, | CM, | GA, | GN, | GQ, | GW, | ML, | MR, | NE, | SN, | TD, | TG, | BW, | GH, | | |
| | | GM, | KE, | LS, | MW, | MZ, | NA, | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW, | AM, | AZ, | BY, | | |
| | | KG, | KZ, | MD, | RU, | TJ, | TM | | | | | | | | | | | | |
| AU | AU 2006275697 | | | | | | 2007 | 0208 | AU 2006-275697 | | | | | | 20060727 | | | | |
| CA | 2617 | 310 | | | A1 | | 2007 | 0208 | | CA 2 | 006- | | 20060727 | | | | | | |
| EP | 1919 | 485 | | | A1 | | 2008 | 0514 | EP 2006-788816 | | | | | | 20060727 | | | | |
| | R: | AT, | BE, | BG, | CH, | CY, | CZ, | DE, | DK, | EE, | ES, | FI, | FR, | GB, | GR, | HU, | IE, | | |
| | | IS, | IT, | LI, | LT, | LU, | LV, | MC, | NL, | PL, | PT, | RO, | SE, | SI, | SK, | TR, | AL, | | |
| | | BA, | HR, | MK, | RS | | | | | | | | | | | | | | |
| KR | | | | | | | 2008 | 0424 | KR 2008-705010 | | | | | | 20080229 | | | | |
| PRIORIT | Y APP | LN. | INFO | . : | | US 2005-704380P | | | | | | 1 | | | | | | | |
| | | | | | WO 2006-US29451 W 20 | | | | | | | | 0060 | 727 | | | | | |
| ATUED C | THER COURCE/C). | | | | | | CACDEACT 146.206459. MADDAT 146.206459 | | | | | | | | | | | | |

AB Title pyrrolidine-containing boronic acids [I; R = N-protecting group, e.g., benzyl, Cbz, Boc, Fmoc, Alloc, Teoc; R1 = (un)substituted hydrocarbon group optionally containing hetero atoms, e.g., 3-pyrrolidinyl; R2, R3 = independently or together a group that can be hydrolyzed to OHI, useful for treating patients suffering from diabetes and related diseases (no data), are prepared by coupling RRINCH2COA (II; same R, R1; A = OH or a group which may be displaced by an amine, e.g., imidazolyl, halo, azide, carbonate ester) with boropyrrolidines (III; same R2, R3). Further, intermediates II are prepared by sequential alkylation of R1NH2 (same R1) with LCH2CO2R4 [L = leaving group, preferably Cl, Br, iodo, mesylate, triflate; R4 = carboxyl-protecting group, preferably Me, Et, CMe3, allyl, benzyl] in presence of a base, preferably Na2CO3, K2CO3 or Cs2CO3, to give R1NHCH2CO2R4, protection of the secondary amine to give RR1NCH2CO2R4, and conversion of the latter to RR1NCH2COA. In the context of synthesizing heterocyclic boronic acid compds., a convergent synthetic methodol. is particularly efficient for preparing boropyrrolidines, e.g., IV (preparation given), and derivs. of boropyrrolidines.

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 9 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2006:1157964 CAPLUS Full-text

DOCUMENT NUMBER: 145:471409

TITLE:

Preparation of five- and six-membered cyclic amines as

coaculation factor Xa inhibitors

INVENTOR(S): Groebke-Zbinden, Katrin; Haap, Wolfgang; Hilpert, Hans; Panday, Narendra; Ricklin, Fabienne; Wirz, Beat

PATENT ASSIGNEE(S): F. Hoffmann-La Roche A.-G., Switz.

SOURCE: PCT Int. Appl., 169pp.

CODEN: PIXXD2

Patent

DOCUMENT TYPE: LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PATENT NO. | | | | | KIN |) | DATE | | | APPL | ICAT | D | DATE | | | | | |
|------------|-----------------|------|------|-----|-----|-----|-------------|------|------|------|------|-------|------|----------|-----|-----|-----|-----|
| | | | | | | - | | | | | | - | | | | | | |
| W | WO 2006114401 A | | | | | A2 | A2 20061102 | | | | | 006-1 | 2 | 20060424 | | | | |
| W | 0 | 2006 | 1144 | 01 | | A3 | | 2007 | 0412 | | | | | | | | | |
| | | ₩: | AE, | AG, | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BR, | BW, | BY, | BZ, | CA, | CH, |

```
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR,
             KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX,
             MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE,
             SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,
             VN, YU, ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
             CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
             GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA
     US 20060247238
                          A1
                                20061102
                                            US 2006-403973
                                                                    20060413
     AU 2006239329
                                20061102
                                            AU 2006-239329
                          A1
                                                                    20060424
     CA 2604603
                          A1
                                20061102
                                            CA 2006-2604603
                                                                    20060424
     EP 1877404
                          A2
                                20080116
                                             EP 2006-777206
                                                                    20060424
         R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR
     NO 2007005158
                          Α
                                20071123
                                            NO 2007-5158
                                                                    20071010
     MX 200713203
                                            MX 2007-13203
                          Α
                                20071211
                                                                    20071023
     KR 2007114836
                          Α
                                20071204
                                            KR 2007-724610
                                                                    20071025
                                            IN 2007-CN4815
                                                                    20071029
     IN 2007CN04815
                          Α
                                20080321
     CN 101208334
                                20080625
                                            CN 2006-80023061
                                                                    20071226
PRIORITY APPLN. INFO .:
                                            EP 2005-103452
                                                                 A 20050427
                                            WO 2006-EP61776
                                                                 W 20060424
                        MARPAT 145:471409
OTHER SOURCE(S):
GI
```

AB The invention is concerned with novel cyclic amines (shown as I; variables defined below; e.g. (28, 48).4-I[[5-chlorothien-2-yl)carbonyl]amino]-1-[[[2-fluoro-4-(2-oxo-2H-pyridin-1-yl)phenyl]carbamoyl]methyl]pyrrolidine-2-carboxylic acid Me seter (shown as II)) as well as physiol, acceptable salts thereof. These compds inhibit the coagulation factor Xa and can be used as medicaments (e.g. for thromboric disorders). For I: XI is -CGR2C(0)NH--C(0)CENH-, -C(0)NH- or C(0)C(0)NH-; X2 is (un)substituted phenylene, heteroarylene or heterocyclylene; X3 is H or (un)substituted Ph, heteroaryl or heterocyclyl; R2 is hydrogen or C1-6 alkyl; Y1 is -C(0)NH-, -C(0)NHC2- or -NHC(0)-; Y2 is (un)substituted phenylene, heteroarylene or heterocyclylene; Y3 is H, or (un)substituted Ph, heteroaryl or heterocyclyl; R1 is shalogen, carboxy, C1-6-alkoxycarbonyl, hydroxy C1-6-alkyl-NHC(0)-, N(C1-6-alkyl-NHC(0)-, alkyl) (hydroxy C1-6-alkyl-NHC(0)-, c1, R1'' is H; or R1'

and Rl'' form, together with the same C atom to which they are attached, -C(O)-, -C(:CH2)-, C3-7-cycloalkyl or heterocyclyl, one or two C atoms of said heterocyclyl being optionally replaced with a carbonyl group; R2 is H or C1-6alkyl; n = 1-2; addnl. details including provisos are given in the claims. Methods of preparation are claimed and prepns. and/or characterization data for .apprx.70 examples of I are included. For example, II was prepared in 4steps starting with coupling of trans-4-(Bocamino)-L-proline Me ester hydrochloride with 5-chlorothiophene-2-carboxylic acid to give (2S, 4R)-4-[[(5chlorothien-2-vl)carbonvllaminolpyrrolidine-1.2- dicarboxylic acid 1-tert-Bu ester 2-Me ester, which was deprotected and reacted with 2-bromo-N-[2-fluoro-4-(2-oxo-2H-pyridin-1-yl)phenyl]acetamide (prepared from 1-(4-amino-3fluorophenyl)-1H-pyridin-2-one and bromoacetyl bromide). The use of lipase from Candida (e.g. Candida antarctica from B) or Pseudomonas fluorescens or a protease from Aspergillus sojae for enzymic resolution of N-Boc-3-cyano-4hydroxypyrrolidines and N-Boc-3-acyloxy-4-cyanopyrrolidines is also claimed. Ki values for factor Xa are tabulated for 5 examples of I.

L5 ANSWER 10 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2006:815924 CAPLUS Full-text

DOCUMENT NUMBER: 145:249186

TITLE:

Preparation of pyrrolopyridines and analogs as inhibitors of tryptase

INVENTOR(S):

Hirschbein, Bernard; Lee, Chang Sun; Litvak, Joane; Liu, Weili; Sendzik, Martin; Shelton, Emma J.;

Spencer, Jeffrev R.; Sperandio, David; Tai, Vincent

W-F.; Winslow-Lohman, Julia; Yee, Robert

PATENT ASSIGNEE(S): Axvs Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 222pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE · English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PA: | TENT | NO. | | | KIN | D | DATE | | | APPL | ICAT | ION : | NO. | | | ATE | |
|------|-------------------|-------|-----|-----|-----|-----|------|------|-----|------|------|-------|-----|-----|-----|------|-----|
| | 2006 | | | | | | | | | WO 2 | 006- | US46 | 80 | | | 0060 | |
| | W: | | | | | | AU, | | | | | | | | | | |
| | | | | | | | DE, | | | | | | | | | | |
| | | | | | | | ID, | | | | | | | | | | |
| | | | | | | | LT, | | | | | | | | | | |
| | | | | | | | NZ, | | | | | | | | | | |
| | | SG, | SK, | SL, | SM, | SY, | ТJ, | TM, | TN, | TR, | TT, | TZ, | UA, | UG, | US, | UZ, | VC, |
| | | VN, | YU, | ZA, | ZM, | zw | | | | | | | | | | | |
| | RW: | ΑT, | BE, | BG, | CH, | CY, | CZ, | DE, | DK, | EE, | ES, | FI, | FR, | GB, | GR, | HU, | ΙE, |
| | | IS, | IT, | LT, | LU, | LV, | MC, | NL, | PL, | PT, | RO, | SE, | SI, | SK, | TR, | BF, | BJ, |
| | | CF, | CG, | CI, | CM, | GA, | GN, | GQ, | GW, | ML, | MR, | NE, | SN, | TD, | TG, | BW, | GH, |
| | | GM, | KE, | LS, | MW, | MZ, | NA, | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW, | AM, | AZ, | BY, |
| | | KG, | KZ, | MD, | RU, | TJ, | TM | | | | | | | | | | |
| RIT | ITY APPLN. INFO.: | | | | | | | | | US 2 | 005- | 6518 | 70P | | P 2 | 0050 | 210 |
| R S0 | TIRCE | (8) . | | | MAR | PAT | 145. | 2491 | 86 | | | | | | | | |

PRIOR OTHER SOURCE(S): MARPAT 145:249186

GI

^{*} STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. I [A = (un)substituted benzo, pyridino, pyrimidino, etc.; D = N or CR6 wherein R6 = H, alkyl, halo, etc.; R1 = H, alkylsulfonyl, arylsulfonyl, etc.; R2 = H, alkyl, alkylsulfonyl; R3 = H, alkyl. OH, CN, etc.; R4 and R4b independently = H, (un)substituted alkyl, acyl, etc.; L = functionalized bridging ligand; Z = (un)substituted theterocycle], and their pharmaceutically acceptable salts, are prepared and disclosed as tryptase inhibitors. Thus, e.g., II was prepared by coupling of [5'-chloro-2'-hydroxy-3'-(1H-pyrrolo[2,3-c]pyridin-2-yl)-biphenyl-4- yl]acetic acid (preparation given) with 4-phenylmethylpiperidin-4-ol. Assays for determining activity against human tryptase are described (no data). Further disclosed are pharmaceutical composition comprising these compds. and method of treating asthma, allergic rhinitis, and/or Chronic Obstructive Pulmonary Disease utilizing these compds.

L5 ANSWER 11 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2006:408956 CAPLUS Full-text

DOCUMENT NUMBER: 144:450718

TITLE: Ortho-condensed pyridine and pyrimidine derivatives (e. q. purines) as protein kinases inhibitors and

their preparation, pharmaceutical compositions and use for treatment of protein kinase mediated diseases such

as proliferative diseases

INVENTOR(S): Berdini, Valerio; Boyle, Robert George; Saxty, Gordon; Verdonk, Marinus Leendert; Woodhead, Steven John;

Wyatt, Paul Graham; Sore, Hannah Fiona; Caldwell, John; Collins, Ian; Da Fonseca, Tatiana Faria; Donald,

Alastair

PATENT ASSIGNEE(S): Astex Therapeutics Limited, UK; The Institute of

Cancer ResearchRoyal Cancer Hospital; Cancer Research

Technology Limited

SOURCE: PCT Int. Appl., 174 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| F | | I NO. | | | KIN | | DATE | | | APPL | | | | | | ATE | |
|--------|-----------------------|-------|-------|-----|-----|-----|------|------|------|------|------|------|-----|-----|------|------|-----|
| W | | 06046 | | | | | | | | | | | | | | 0051 | |
| | W | AE | , AG, | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BR, | BW, | BY, | BZ, | CA, | CH, |
| | | CN | , co, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | EG, | ES, | FI, | GB, | GD, |
| | | GE | , GH, | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KΕ, | KG, | KM, | KΡ, | KR, | KZ, |
| | | LC | , LK, | LR, | LS, | LT, | LU, | LV, | LY, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | MZ, |
| | | NA | , NG, | ΝI, | NO, | ΝZ, | OM, | PG, | PH, | PL, | PT, | RO, | RU, | SC, | SD, | SE, | SG, |
| | | SK | , SL, | SM, | SY, | ТJ, | TM, | TN, | TR, | TT, | TZ, | UA, | UG, | US, | UZ, | VC, | VN, |
| | | YU | , ZA, | ZM, | ZW | | | | | | | | | | | | |
| | R | V: AT | , BE, | BG, | CH, | CY, | CZ, | DE, | DK, | EE, | ES, | FI, | FR, | GB, | GR, | HU, | IE, |
| | | IS | , IT, | LT, | LU, | LV, | MC, | NL, | PL, | PT, | RO, | SE, | SI, | SK, | TR, | BF, | BJ, |
| | | CF | , CG, | CI, | CM, | GA, | GN, | GQ, | GW, | ML, | MR, | NE, | SN, | TD, | TG, | BW, | GH, |
| | | GM | , KE, | LS, | MW, | MZ, | NA, | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW, | AM, | ΑZ, | BY, |
| | | KG | , KZ, | MD, | RU, | ΤJ, | TM | | | | | | | | | | |
| E | P 18 | 12003 | | | A1 | | 2007 | 0801 | | EP 2 | 005- | 7968 | 42 | | 2 | 0051 | 025 |
| | R | : AT | , BE, | BG, | CH, | CY, | CZ, | DE, | DK, | EE, | ES, | FΙ, | FR, | GB, | GR, | HU, | IE, |
| | | IS | , IT, | LI, | LT, | LU, | LV, | MC, | NL, | PL, | PT, | RO, | SE, | SI, | SK, | TR | |
| J | JP 2008517983 | | | | | | 2008 | 0529 | | JP 2 | 007- | 5384 | 99 | | 2 | 0051 | 025 |
| PRIORI | RIORITY APPLN. INFO.: | | | | | | | | | GB 2 | 004- | 2368 | 4 | - 2 | A 2 | 0041 | 025 |
| | | | | | | | | | US 2 | 004- | 6217 | 19P | 1 | P 2 | 0041 | 025 | |
| | | | | | | | | | US 2 | 005- | 6839 | 80P |] | P 2 | 0050 | 524 | |
| | | | | | | | | | | WO 2 | 005⊣ | GB41 | 15 | 1 | W 2 | 0051 | 025 |

AB The invention provides a compound for use as a protein kinase B inhibitor of prophylaxis or treatment of protein kinase mediated diseases, the compound being a compound of the formula I or salts, solvates, tautomers or N-oxides thereof. Compds. of formula I where in T is N or CR5; J1-J2 is N=CR6, R7C=N, R8NCO, (R8)2CO, N=N, or R7C=CR6; A is (un)substituted C1-7 saturated hydrocarbon linker having maximum 5 atoms between R1 and NR2R3, and maximum 4 atoms between E and NR2R2, where one of the carbon atoms may be optionally replaced by O or N; E is mono- or bicyclic carbocyclic or heterocyclic group, or an acyclic group X-G; X is CH2, O, S, NH; G is C1-4 alkylene where one of the carbon atoms may be optionally replaced by O, S or NH; R1 is is H, or (hetero)arv1; R2 and R3 are independently H, (un)substituted C1-4 heterocarbyl, or (un)substituted C1-4 acyl; or NR3R3 together and an atom from the linker A may form a saturated 4- to 7-membered monocyclic heterocyclic group, or a cyano group; R4 is H, halo, (un) substituted C1-6 saturated hydrocarbyl, CN, CONH2, CONHR9, CF3, NH2, NHCOR9, or NHCONHR9; R9 is (un) substituted Ph, or (un) substituted Bn; or their pharmaceutically acceptable salts, solvates, tautomers, or N-oxides thereof. Example compound II was prepared by condensation of 4-[9-(tetrahydropyran-2-v1)-9H- purine-6yl]benzaldehyde with tert-butanesulfinamide; the resulting 2-methylpropane-2sulfinic acid 4-[9-(tetrahydropyran-2-y1)-9H-purine-6- y1]benzylideneamide reacted with benzylmagnesium chloride to give 2-methylpropane-2-sulfinic acid (2-phenyl-[4-[9-(tetrahydropyran-2-yl)-9H-purine-6-yl]phenyl]ethyl)amide, which underwent hydrolysis to give example compound II. All the invention compds, were tested for their protein kinase inhibitory activity. From the assay it was determined that compound II and some of the other example compds. exhibited IC50 values of less than 10 µM against both protein kinase A and B. The invention compds. were also evaluated for their antiproliferative activity. Preferred compds. of the invention were found to have IC50 values of less than 30 uM in this assav..

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 12 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2006:365172 CAPLUS Full-text

3

DOCUMENT NUMBER: 144:382018

TITLE: Methods for the treatment of substance abuse and addiction

INVENTOR(S): Bristow, Linda; Fong, Tung M.; Morse, Andrew C.

PATENT ASSIGNEE(S): Merck & Co., Inc., USA SOURCE: PCT Int. Appl., 63 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

| | | ENT I | | | | | | DATE | | | | ICAT | | | | | ATE | |
|-------|-----------------------|-------|------|-----|-----|-----|-----|------|------|-----|------|------|------|-----|-----|-----|------|-----|
| | WO | 2006 | 0417 | 69 | | A2 | | 2006 | 0420 | | | | | | | | 0050 | 930 |
| | WO | 2006 | 0417 | 69 | | A3 | | 2007 | 0614 | | | | | | | | | |
| | | W: | ΑE, | AG, | AL, | AM, | ΑT, | AU, | AZ, | BA, | BB, | BG, | BR, | BW, | BY, | BZ, | CA, | CH, |
| | | | CN, | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | EG, | ES, | FI, | GB, | GD, |
| | | | GE, | GH, | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | KM, | KP, | KR, | KZ, |
| | | | LC, | LK, | LR, | LS, | LT, | LU, | LV, | LY, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | MZ, |
| | | | NA, | NG, | NI, | NO, | NZ, | OM, | PG, | PH, | PL, | PT, | RO, | RU, | SC, | SD, | SE, | SG, |
| | | | SK, | SL, | SM, | SY, | TJ, | TM, | TN, | TR, | TT, | TZ, | UA, | UG, | US, | UZ, | VC, | VN, |
| | | | YU, | ZA, | ZM, | ZW | | | | | | | | | | | | |
| | | RW: | AT, | BE, | BG, | CH, | CY, | CZ, | DE, | DK, | EE, | ES, | FI, | FR, | GB, | GR, | HU, | ΙE, |
| | | | IS, | IT, | LT, | LU, | LV, | MC, | NL, | PL, | PT, | RO, | SE, | SI, | SK, | TR, | BF, | ВJ, |
| | | | CF, | CG, | CI, | CM, | GA, | GN, | GQ, | GW, | ML, | MR, | NE, | SN, | TD, | TG, | BW, | GH, |
| | | | GM, | KE, | LS, | MW, | MZ, | NA, | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW, | AM, | AZ, | BY, |
| | | | KG, | KZ, | MD, | RU, | TJ, | TM, | AP, | EA, | EP, | OA | | | | | | |
| | EP | 1804 | 798 | | | A2 | | 2007 | 0711 | | EP 2 | 005- | 8121 | 68 | | 2 | 0050 | 930 |
| | | R: | AT, | BE, | BG, | CH, | CY, | CZ, | DE, | DK, | EE, | ES, | FI, | FR, | GB, | GR, | HU, | IE, |
| | | | IS, | IT, | LI, | LT, | LU, | LV, | MC, | NL, | PL, | PT, | RO, | SE, | SI, | SK, | TR, | AL, |
| | | | BA, | HR, | MK, | YU | | | | | | | | | | | | |
| | US 20080021067 | | | | | A1 | | 2008 | 0124 | | US 2 | 007- | 6620 | 18 | | 2 | 0070 | 305 |
| PRIOR | RIORITY APPLN. INFO.: | | | | | | | | | | US 2 | 004- | 6160 | 64P | | P 2 | 0041 | 005 |
| | NIONIII MELLIN. 11110 | | | | | | | | | | WO 2 | 005- | US35 | 449 | | w 2 | 0050 | 930 |
| | | | | | | | | | | | _ | - | | - | | _ | | - |

OTHER SOURCE(S): MARPAT 144:382018

The resent invention relates to methods of treating and preventing substance addiction and substance abuse, including nicotine addiction and nicotine addiction-related disorders in a subject comprising administering a melanocortin 4 receptor agonist to said subject. The present invention further relates to methods of treating or preventing substance addiction and substance addiction-related disorders in a subject comprising administering a melanocortin 4 receptor agonist to said subject. The present invention further provides for pharmaceutical compns. and medicaments useful in carrying out these methods.

L5 ANSWER 13 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2006:236714 CAPLUS Full-text

DOCUMENT NUMBER: 144:287793

TITLE: Inhibition of voluntary ethanol consumption with non-peptidyl melanocortin 4-receptor agonists

INVENTOR(S): Bristow, Linda; Fong, Tung M.; Morse, Andrew C.; Ren,

Kunkun

PATENT ASSIGNEE(S): Merck & Co., Inc., USA

SOURCE: PCT Int. Appl., 60 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT | NO. | | | KIN | D | DATE | | | APPL | ICAT | I NOI | NO. | | D | ATE | |
|---------|------|-----|-----|-----|-----|------|------|-----|------|-------|-------|-----|-----|-----|------|-----|
| | | | | | - | | | | | | | | | | | |
| WO 2006 | 0286 | 31 | | A2 | | 2006 | 0316 | | WO 2 | 005-1 | US28 | 128 | | 2 | 0050 | 809 |
| W: | AE, | AG, | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BR, | BW, | BY, | BZ, | CA, | CH, |
| | CN, | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | EG, | ES, | FI, | GB, | GD, |
| | GE, | GH, | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | KM, | KP, | KR, | KZ, |

```
LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA,
            NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK,
            SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU,
            ZA, ZM, ZW
        RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
            IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
            CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
            GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
            KG, KZ, MD, RU, TJ, TM
                             20070509
                                          EP 2005-812403
    EP 1781283
                         A2
        R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
            IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL,
            BA, HR, MK, YU
                        A1
                                           US 2007-660117
    US 20080085885
                               20080410
                                                                  20070212
                                                             P 20040813
PRIORITY APPLN. INFO.:
                                           US 2004-601486P
                                           WO 2005-US28128
                                                             W 20050809
```

OTHER SOURCE(S): MARPAT 144:287793

The present invention relates to methods of inhibiting or reducing voluntary

alc. consumption in a subject comprising administering a non-peptidvl melanocortin 4 receptor agonist to said subject. The present invention further relates to methods of treating or preventing alcoholism, alc. abuse, and alc. related disorders in a subject comprising administering a nonpeptidyl melanocortin 4 receptor agonist to said subject. The present invention further provides for pharmaceutical compns. and medicaments useful in carrying out these methods.

L5 ANSWER 14 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2006:167664 CAPLUS Full-text

DOCUMENT NUMBER: TITLE:

144:247201 Method of stimulating the motility of the

gastrointestinal system using growth hormone

secretagogues, and therapeutic use

INVENTOR(S): Polvino, Wiliam J.

PATENT ASSIGNEE(S): Sapphire Therapeutics, Inc., USA

SOURCE: PCT Int. Appl., 122 pp.

CODEN: PIXXD2 Patent.

DOCUMENT TYPE: LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PA' | TENT | | | | KIN | D | DATE | | | APPL | ICAT | ION : | .00 | | | ATE | |
|-----|--------------|---------------------------------|---------------------------------|--------------------------------|--------------------------|--------------------------|---------------------------------|--------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| | 2006 | 0209 | 30 | | A2
A3 | | 2006 | | | WO 2 | 005- | US28 | 851 | | | 0050 | |
| WO | 2006
W: | AE,
CN,
GE,
LC, | AG,
CO,
GH,
LK, | AL,
CR,
GM,
LR, | AM,
CU,
HR,
LS, | AT,
CZ,
HU,
LT, | AU,
DE,
ID,
LU,
PG, | AZ,
DK,
IL,
LV, | DM,
IN,
MA, | DZ,
IS,
MD, | EC,
JP,
MG, | EE,
KE,
MK, | EG,
KG,
MN, | ES,
KM,
MW, | FI,
KP,
MX, | GB,
KR,
MZ, | GD,
KZ,
NA, |
| | RW: | ZA,
AT,
IS,
CF,
GM, | ZM,
BE,
IT,
CG,
KE, | ZW
BG,
LT,
CI,
LS, | CH,
LU,
CM,
MW, | CY,
LV,
GA, | TN,
CZ,
MC,
GN,
NA, | DE,
NL,
GQ, | DK,
PL,
GW, | EE,
PT,
ML, | ES,
RO,
MR, | FI,
SE,
NE, | FR,
SI,
SN, | GB,
SK,
TD, | GR,
TR,
TG, | HU,
BF,
BW, | IE,
BJ,
GH, |
| | 2005
2576 | 2725 | 98 | | RU,
A1 | · | 2006
2006 | | | | | 2725
2576 | | | | 0050 | |

EP 1789067 A2 20070530 EP 2005-786631 R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU
US 20070191283 A1 20070816 US 2005-203639 20050812
CN 101076349 A 20071121 CN 2005-80032193 20050812
JP 2008509930 T 20080403 JP 2007-525853 20050812
IN 2007MN00186 A 20070720 IN 2007-MN186 20070206
MX 200701477 A 20071010 MX 2007-1477 20070206
MX 2007064593 A 20070621 KR 2007-705083 20070302
PRIORITY APPLN. INFO:: W 2004-600959P P 20040812
W 2005-US28851 W 20050812

MARPAT 144:247201

AB The invention discloses a method for stimulating the motility of the gastrointestinal system in a subject in need thereof, wherein the subject suffers from maladies (i.e., disorders or diseases) of the gastrointestinal system. The method comprises administering to a subject in need thereof a therapeutically effective amount of a growth hormone secretagoque compound or a pharmaceutically acceptable salt, hydrate or solvate thereof. The growth hormone secretagoque can be co-administered with a laxative, a H2 receptor antagonist, a serotonin 5-HT4 agonist, an antacid, an opioid antagonist, a proton pump inhibitor, a motilin receptor agonist, dopamine antagonist, a cholinergic agonist, a cholinesterase inhibitor, somatostatin, octreotide, or any combination thereof.

L5 ANSWER 15 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2005:1272696 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER:

144:36440

TITLE: Method for preparation and application of bimolecular derivatives of Huperzine-B and dual functional

groups-containing derivatives of Huperzine-B

INVENTOR(S): Bai, Donglu; Feng, Song; He, Xuchang; Tang, Xican; Wang, Rui

PATENT ASSIGNEE(S): Shanghai Institute of Materia Medica, Chinese Academy

of Sciences, Peop. Rep. China

SOURCE: Faming Zhuanli Shenging Gongkai Shuomingshu, 20 pp.

> CODEN: CNXXEV Patent

LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

DOCUMENT TYPE: PATENT INFORMATION:

KIND DATE APPLICATION NO. DATE PATENT NO. CN 1616431 A 20050518 ______ 20031113 A 20050518 CN 2003-10108598 CN 2003-10108598 PRIORITY APPIN. INFO: CN 2003-10108598
OTHER SOURCE(S): CASREACT 144:36440; MARPAT 144:36440 20031113

GI

AΒ The invention relates to bimol, derivs, of Huperzine-B and dual functional groups-containing derivs. of Huperzine-B, their preparation methods and applications. The bimol. derivs. and dual functional groups-containing derivs. I or II (R1 = CO, CH2; R2, R3 = H, Me, Et, Pr, cyclopropyl, Bn, substituted phenyl; Ar = alkoxy, halo, nitro, substituted Ph, naphthyl, pyridinyl, taurine; X,Y = C, N, O; m = 1,2,3; n = 0, 1, 2, 3; p = 1 to 12 integers) were prepared using Huperzine-B as starting material, and had a higher inhibiting activity on acetylcholine esterase than that of Huperzine-B as determined by the in vitro bioactivity test. Some derivs, have an inhibiting activity several hundreds times, or even several thousands times higher than that of the parent compound It is hopeful to obtain a medicine having high therapeutic index and little adverse effect for the treatment of presentle dementia by further optimization and selection of these derivs.

L5 ANSWER 16 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN 2005:1220275 CAPLUS Full-text ACCESSION NUMBER:

DOCUMENT NUMBER: 143:460031

TITLE: Preparation of heterocycle-containing phenol ethers, thioethers and related derivatives as histamine H3

ligands

Bernardelli, Patrick; Cronin, Andrew Michael; Denis, INVENTOR(S):

Alexis; Denton, Stephen Martin; Jacobelli, Henry; Kemp, Mark Ian; Lorthiois, Edwige; Rousseau, Fiona; Serradeil-Civit, Delphine; Vergne, Fabrice

PATENT ASSIGNEE(S): Warner-Lambert Company LLC, USA

SOURCE: PCT Int. Appl., 216 pp.

CODEN: PIXXD2 DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO. KIND APPLICATION NO. DATE DATE WO 2005-IB1114 WO 2005108384 A1 20051117 20050419 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,

```
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
            GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ,
            LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA,
            NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL,
            SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA,
            ZM, ZW
        RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
            AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
            EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,
            RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
            MR, NE, SN, TD, TG
                               20051109
                                         EP 2004-291187
    EP 1593679
                         A1
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR
                                          AU 2005-240846
    AU 2005240846
                         A1
                               20051117
                                                                  20050419
    CA 2565852
                         A1
                               20051117
                                           CA 2005-2565852
                                                                  20050419
    EP 1747210
                         A1
                               20070131
                                           EP 2005-718521
                                                                  20050419
        R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
            IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA,
            HR, LV, MK, YU
                               20070418
                                           CN 2005-80014662
    CN 1950351
                         Α
                                                                  20050419
    BR 2005010664
                         Α
                               20071204
                                           BR 2005-10664
                                                                  20050419
    JP 2007536365
                         Т
                               20071213
                                           JP 2007-512541
                                                                  20050419
    MX 2006PA12819
                         Α
                               20070126
                                           MX 2006-PA12819
                                                                  20061106
    KR 843848
                         В1
                              20080703
                                           KR 2006-723284
                                                                  20061106
    NO 2006005635
                               20070201
                                           NO 2006-5635
                        A
                                                                  20061206
                                           EP 2004-291187
                                                               A 20040507
PRIORITY APPLN. INFO.:
                                           GB 2005-4564
                                                              A 20050304
                                           WO 2005-IB1114
                                                              W 20050419
OTHER SOURCE(S):
                       MARPAT 143:460031
```

AB Title compds. [I; m, p = 0-3; m+p ≤4; X = cyano, CH2OH, alkoxymethyl, CO2H, alkoxycarbonyl, aminomethyl, aminocarbonyl, CH2Ohet (het = (substituted) monoor bicyclic heteroaryl), CH2het, het; Y = CH2, CH(OH), CO, N (substituted by H, at al.); ZR is in the meta or para position of the Ph group; Z = O, S, S(0), S(0)2; R = (cyclo)aminoalkyl; addnl. details are given in the claims], were prepared Thus, reaction of 3-[4-(dimethylamino)methyltetrahydro-2Hpyran-4-vllphenol (preparation given) with 1-(3-chloropropyl)pyrrolidine (preparation given) gave 20% title compound (II). In a cell-based H3 functional assay measuring cAMP through β -lactamase reporter gene activity. I showed Ki <5 uM; values are tabulated for 26 examples of I. I are H3 ligands useful in treating e.g. inflammatory, allergic and respiratory diseases. THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 6 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 17 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2005:1123812 CAPLUS Full-text

DOCUMENT NUMBER: 143:379815

TITLE: Method of reducing C-reactive protein using growth

hormone secretagogues

INVENTOR(S): Polvino, William J.; Carpi, David B.; Smith, Roy G.
PATENT ASSIGNEE(S): Rejuvenon Corporation, USA

SOURCE: PCT Int. Appl., 135 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| TENT | NO. | | | KIN | D | DATE | | i | APPL | | | | | D | ATE | | |
|-----------------------|---|---|--|--|---|--|---|--|---|--|---|---|---|--|--|--|---|
| 2005 | 0972 | 61 | | A1 | - | 2005 | 1020 | 1 | WO 2 | | | | | 2 | 0050 | 330 | |
| W: | ΑE, | AG, | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BR, | BW, | BY, | BZ, | CA, | CH, | |
| | CN, | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | EG, | ES, | FI, | GB, | GD, | |
| | GE, | GH, | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | KP, | KR, | KZ, | LC, | |
| | LK, | LR, | LS, | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | MZ, | NA, | NI, | |
| | NO, | NZ, | OM, | PG, | PH, | PL, | PT, | RO, | RU, | SC, | SD, | SE, | SG, | SK, | SL, | SM, | |
| | SY, | ΤJ, | TM, | TN, | TR, | TT, | TZ, | UA, | UG, | US, | UZ, | VC, | VN, | YU, | ZA, | ZM, | zw |
| RW: | GM, | KE, | LS, | MW, | MZ, | NA, | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW, | AM, | | | |
| | KG, | ΚZ, | MD, | RU, | ΤJ, | TM, | ΑT, | BE, | BG, | CH, | CY, | CZ, | DE, | DK, | | | |
| | EE, | ES, | FI, | FR, | GB, | GR, | HU, | ΙE, | IS, | IT, | LT, | LU, | MC, | NL, | PL, | PT, | |
| | RO, | SE, | SI, | SK, | TR, | BF, | ΒJ, | CF, | CG, | CI, | CM, | GA, | GN, | GQ, | GW, | ML, | |
| | MR, | NE, | SN, | TD, | TG | | | | | | | | | | | | |
| 2565 | 324 | | | A1 | | 2005 | 1020 | | CA 2 | 005- | 2565 | 324 | | 2 | 0050 | 330 | |
| 2005 | 0261 | 201 | | A1 | | 2005 | 1124 | 1 | US 2 | 005- | 9433 | 9 | | 2 | 0050 | 330 | |
| 1735 | 055 | | | A1 | | 2006 | 1227 | 1 | EP 2 | 005- | 7331 | 03 | | 2 | 0050 | 330 | |
| R: | ΑT, | BE, | BG, | CH, | CY, | CZ, | DE, | DK, | EE, | ES, | FI, | FR, | GB, | GR, | HU, | ΙE, | |
| | IS, | IT, | LI, | LT, | LU, | MC, | NL, | PL, | PT, | RO, | SE, | SI, | SK, | TR | | | |
| JP 2007531769 | | | | | | 2007 | 1108 | | JP 2 | 007- | 5065 | 67 | | 2 | 0050 | 330 | |
| | | | | | | 2007 | 0122 | 1 | KR 2 | 006- | 7214 | 82 | | 2 | 0061 | 017 | |
| RIORITY APPLN. INFO.: | | | | | | | | 1 | US 2 | 004- | 5574 | 66P | 1 | P 2 | 0040 | 330 | |
| | | | | | | 1 | WO 2 | 005- | US10 | 927 | 1 | vi 2 | 0050 | 330 | | | |
| | 2005
W:
RW:
2565
2005
1735
R:
2007 | W: AE,
CN,
GE,
LK,
NO,
SY,
RW: BW,
AZ,
EE,
RO,
MR,
2565324
20050261
1735055
R: AT,
IS,
20075317 | 2005097261 W: AE, AG, CN, CO, GE, GH, LK, LR, NO, NZ, SY, IJ, RW: BW, GH, AZ, BY, EE, ES, RO, SS2, MR, NE, 2565324 20050261201 1735055 R: AT, BE, IS, IT, 2007531769 | 2005097261 W: AE, AG, AL, CN, CO, CR, GE, GH, GM, LK, LR, LS, NO, NZ, OM, SY, IJ, TM, RN: BW, CH, GM, AZ, BY, KG, EE, ES, FI, RO, SE, SI, MR, NE, SN, 2505024 20050261201 1735055 R: AT, BE, BG, IS, IT, LI, 2007531769 2007010151 | 2005097261 A1 W: AB, AG, AL, AM, CN, CO, CR, CU, GE, GH, GM, HR, LK, LR, LS, LT, NO, NZ, OM, PG, SY, TJ, TM, TN, RW: BW, GH, GM, KE, AZ, BY, KG, KE, AB, BY, KG, KB, AR, NE, SN, TD, 2565324 A1 20050261201 A1 1735055 A1 R: AT, BE, BG, CH, LS, LT, LI, LT, 2007531769 T | 2005097261 A1 W: AE, AG, AL, AM, AT, CN, CO, CR, CU, CZ, GE, GH, GM, HR, HU, LK, LR, LS, LT, LU, NO, NZ, OM, PG, PH, SY, TJ, TM, TN, TR, RW: BW, GH, GM, KE, LS, AZ, BY, KG, KZ, MD, EE, ES, FI, FR, GB, RO, SE, SI, SK, TR, MR, NE, SN, TD, TG 2565324 A1 20050261201 A1 1735055 A1 R: AT, BE, BG, CH, CY, 1S, IT, LI, LT, LU, 2007531769 T | 2005097261 A1 2005 W: AE, AG, AL, AM, AT, AU, CN, CO, CR, CU, CZ, DE, GE, GH, GM, HR, HU, ID, LK, LR, LS, LT, LU, LV, NO, NZ, OM, FG, PH, PL, SY, TJ, TM, TN, TR, TT, RW: BW, GH, GM, KE, LS, MM, AZ, BY, KG, KS, MS, EE, SF, FR, GB, GR, RO, SSE, SI, SK, TR, BF, MR, NE, SN, TD, TG 2565324 A1 2005 2565324 A1 2005 2753055 A1 2006 R: AT, BE, BG, CK, CY, CZ, LS, LT, LI, LI, LU, MC, 2007531769 T 2007 | 2005097261 Al 20051020 W: AE, AG, AL, AM, AT, AU, AZ, CN, CO, CR, CU, CZ, DE, DK, GE, GH, GM, BR, HU, ID, IL, LK, LR, LS, LT, LU, LV, MA, NO, NZ, OM, PG, PH, PL, PT, SY, IJ, TM, TN, TR, TT, TZ, RW: BW, GH, GM, KE, LS, MW, MZ, AZ, BY, KG, KZ, MD, RU, TJ, EE, ES, FI, FR, GB, GR, HU, RO, SS, SI, SK, TR, BF, BJ, MR, NE, SN, TD, TG 20050261201 Al 20051224 1735055 Al 20061227 R: AT, BE, BG, CH, CY, CZ, DG IS, IT, LI, LT, LU, MC, NL, 2007531769 T 20071028 | 2005097261 Al 20051020 W: AE, AG, AL, AM, AT, AU, AZ, BA, CN, CO, CR, CU, CZ, DE, DK, DM, GE, GH, GM, HR, HU, ID, IL, IN, LK, LR, LS, LT, LU, LV, MA, MD, NO, NZ, OM, FG, PH, PL, FT, RO, SY, TJ, TM, TN, TR, TT, TZ, UA, AZ, BY, KG, KZ, MD, RU, TJ, TM, EE, ES, FI, FR, GB, GR, HU, IE, RO, SE, SI, SK, TR, BF, BJ, CF, MR, NE, SM, TD, TG 2565324 Al 20051020 Al 200510201 Al 20051020 AT 20051020 Al 20051124 AT 35055 Al 20051127 R: AT, BE, BG, CH, CY, CZ, DE, DK, LS, TL, LT, LT, LW, MC, NL, PK, 2007531769 T 20071108 2007010151 A 20070122 YAPPLIN. INFO:: | 2005097261 A1 20051020 W0 2 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, GE, GH, GM, HR, HU, ID, IL, IN, IG, LK, LR, LS, LT, LU, LV, MA, MD, MG, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SY, IJ, TM, TN, TR, TT, TZ, UA, UG, RW: BW, GH, GM, KE, LS, MM, MZ, NA, SD, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, EE, ES, FI, FR, GB, GR, HU, IE, IS, RO, SE, SI, SK, TR, BF, BJ, CF, CG, 2555324 A1 20051020 CA 2 20050261201 A1 20051020 CA 2 21735055 A1 20051021 VS 2 R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, IS, IT, LI, LT, LU, MC, NL, PL, PT, 2007531769 T 20071018 JP 2 2007010151 A 20070122 KR 2 X APPLIN, INFO: US S | 2005097261 Al 20051020 WO 2005- W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, GE, GH, GM, HR, HU, ID, IL, IN, IS, JC, LK, LK, LK, LS, LT, LU, LV, MA, MD, MG, MK, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SY, JJ, TM, TN, TR, TT, TZ, UA, UG, US, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, EE, ES, FT, FR, GB, GR, HU, IE, IS, IT, RO, SE, ST, SK, TR, BF, BJ, CF, CG, CT, MR, NE, SN, TD, TG 20050261201 Al 20051124 US 2005- R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, IS, IT, LT, LU, MC, NL, PL, PT, RO, 2007531769 T 20070125 KP 2007010151 A 2007010151 A 20070125 KP 2004 | 2005097261 Al 20051020 W0 2005-US100 W1: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, GE, GB, GM, HB, HU, ID, IL, IN, IS, JP, KE, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, RW; BW, GH, GM, KE, LS, MY, MZ, NA, SD, SL, SZ, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, RO, SS, SI, SK, TR, BF, BJ, CF, CG, CI, CM, MR, NE, SN, TD, TG 2565324 Al 20051020 CA 2005-2565. A: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, IS, IT, LI, LT, LU, MC, NL, PL, FT, RO, SE, 2007531769 T 20071108 JP 2007-5065. 2007010151 A 20071128 KR 2004-5214 APPLIN. INFO.: | 2005097261 A1 20051020 W0 2005-US10927 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, GE, GH, GM, HR, HU, ID, II, IN, IS, JP, KE, KG, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MM, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SC, SD, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, RO, SS, SI, SX, TR, BF, BJ, CF, GC, CI, CM, GM, RM, NB, SN, TD, TG 2565324 A1 20051020 CA 2005-2565324 200703201 A1 20051020 CA 2005-2565324 21735055 A1 20061227 E2005-733103 R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, ST, IS, IT, LI, LU, MC, NL, PL, PT, RO, SE, SI, ST, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, ST, ST, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, ST, APPLINI, INFO:: | 2005097261 A1 20051020 W0 2005-US10927 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, GE, GH, GM, HR, HU, ID, IL, IN, IS, JF, KE, KG, KP, LK, LK, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, RW; BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, AZ, BY, KG, KZ, MD, RU, IJ, TM, AT, BE, BG, CH, CY, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, MR, NE, SN, TD, TG 20050261201 A1 20051020 CA 2005-2565324 20050261201 A1 20051020 CA 2005-2565324 20050261201 A1 20051020 CA 2005-33103 R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, IS, IT, LI, LT, LU, MC, NL, FL, PT, RO, SE, SI, SK, 2007531769 T 20071108 JP 2007-506567 2007010151 A 20070122 KR 2004-557466F | 2005097261 A1 20051020 WO 2005-US10927 2 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GE, GH, GM, HR, HU, ID, IL, IM, IS, JP, KE, KG, KP, KR, IM, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SY, TJ, TM, TN, TF, TT, TZ, UA, UG, US, UZ, VC, VN, YU, RW, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, EE, SS, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, RO, SS, SS, ST, KT, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, MR, NE, SN, TD, TG 20050261201 A1 20051020 CA 2005-2565324 2005-933103 22 R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, LI, ST, LT, LU, MC, NL, ST, ST, TL, LI, LU, MC, NL, RD, ST, LI, LI, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, SF, BT, ST, ST, LT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, SF, BT, ST, ST, LT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, SF, BT, ST, ST, LT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, SF, BT, ST, ST, LT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, SP, ST, SP, ST, ST, ST, ST, ST, ST, ST, ST, ST, ST | 2005097261 Al 20051020 WO 2005-US10927 200503 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MM, MX, MZ, NA, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SS, SG, SK, NS, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, RW, BW, GH, GM, KE, LS, MM, MM, AZ, NA, SD, SL, SZ, TZ, UG, ZM, ZM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, RO, SE, SI, SK, TR, BE, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, MR, NE, SN, TD, TG 20050261201 Al 20051020 CA 2005-2565324 200503 R: AT, BE, BG, CH, CY, CZ, DE, DK, ES, ES, FI, FR, GB, GR, HU, IZ, ST, TS, TS, TS, TS, TS, TS, TS, TS, TS | 2005097261 Al 20051020 W0 2005-US10927 20050330 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, EW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MM, MM, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, IJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, RN: BW, GH, GM, KE, LS, MM, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AX, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG 2565324 Al 20051020 CA 2005-2565324 20050330 20050261201 Al 20051124 US 2005-94339 20050330 1735055 Al 20061227 EP 2005-733103 R; AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR 2007531769 T 20071108 JP 2007-506567 20050330 20050330 2007010151 A 20070122 KR 2006-721482 20061017 |

OTHER SOURCE(S): MARPAT 143:379815 The invention discloses a method for reducing C-reactive protein in a subject in need of treatment thereof, wherein the subject is at risk of having or the subject has already had a vascular event or suffering from an inflammatory disease or disorder. In one embodiment, the vascular event is a cardiovascular event (e.g., myocardial infarction). In another embodiment, the vascular event is a cerebrovascular event (e.g., stroke, transient ischemic attacks). In vet another embodiment the vascular event is a peripheral vascular event (e.g., intermittent claudication). The method comprises administering a therapeutically effective amount of at least one growth hormone secretagogue compound or a pharmaceutically acceptable salt, hydrate or solvate thereof. The growth hormone secretagogue can be coadministered with a second growth hormone secretagogue, HMG CoA reductase inhibitor, an ACAT inhibitor, a CETP inhibitor, an anti-inflammatory agent, an ACE inhibitor, a Beta blocker, a cholesterol absorption inhibitor, a nicotonic acid, a fabric acid derivative, a bile acid sequestering agent or a combination thereof.

REFERENCE COUNT:

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 18 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2005:698366 CAPLUS Full-text DOCUMENT NUMBER: 143:166724

TITLE: Prodrugs

Prodrugs of potassium channel inhibitors, and preparation thereof

INVENTOR(S): Gross, Michael F.; Lloyd, John

PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 25 pp., Cont.-in-part of U.S.

Ser. No. 417,355.
CODEN: USXXCO

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE ---------_____ _____ US 20050171156 20050804 US 2005-28399 20050103 A1 US 20040110793 A1 20040610 US 2003-417355 20030416 20060228 US 7005436 B2 US 20060014792 A1 20060119 US 2005-186991 20050721 WO 2006073967 A1 20060713 WO 2005-US47183 20051227 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: AT. BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,

RM: AI, BE, BG, CH, CI, CZ, DE, DK, DE, BC, EJ, FI, FA, GB, GR, HO, ID,
IS, IT, LT, LU, LV, MC, NL, PI, PT, RO, SE, SI, SK, TR, BF, BJ,
CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
KG, KZ, MD, RU, TJ, TM
EP 1841741 A1 20071010 EP 2005-855697 20051227

R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,

IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR
PRIORITY APPLN. INFO:: US 2002-374279P P 20020419

US 2003-417355 A2 20030416 US 2005-28399 A 20050103 WO 2005-US47183 W 20051227

OTHER SOURCE(S): CASREACT 143:166724; MARPAT 143:166724

F MeO

CH2-NH_CO

N

N

O25 NH_CO_Pr-N

I

AB

The invention discloses compds. useful as prodrugs of potassium channel inhibitor compds., in particular as prodrugs of Kv1.5 channel inhibitors. Freparation of compds. of the invention, e.g. I, is described.

L5 ANSWER 19 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2005:470969 CAPLUS Fuil-text

DOCUMENT NUMBER: 143:26636

TITLE: Preparation of 4-[(Arylmethyl)aminomethyl]piperidines as inhibitors of NGF binding (nerve growth factor) to p75NTR (p75 neurotrophic) receptor for treating p75NTR

related diseases

INVENTOR(S): Bosch, Michael; Wagnon, Jean
PATENT ASSIGNEE(S): Sanofi-Synthelabo, Fr.

SOURCE: Fr. Demande, 31 pp.
CODEN: FRXXBL

DOCUMENT TYPE: Patent
LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

| PATENT | . по. | | KIN | D | DATE | | | | ICAT | | | | D | ATE | |
|-------------|--------|---------|-----|-------|-------|-------|-----|------|------|-------|------|-----|-----|---------------|------|
| FR 286 | | | | | | | | | | | | | 2 | 0031 | 201 |
| WO 200 | 505422 | 9 | A1 | | 2005 | 0616 | | WO 2 | 004- | FR30 | 66 | | 2 | 0041 | 130 |
| | | AG, AL, | | | | | | | | | | | | | |
| | | CO, CR, | | | | | | | | | | | | | |
| | | GH, GM, | | | | | | | | | | | | | |
| | | LR, LS, | | | | | | | | | | | | | |
| | | NZ, OM, | | | | | | | | | | | | | |
| | | TM, TN, | | | | | | | | | | | | | |
| Dī | | GH, GM, | | | | | | | | | | | | | |
| 200 | | BY, KG, | | | | | | | | | | | | | |
| | | ES. FI. | | | | | | | | | | | | | |
| | | SI. SK. | | | | | | | | | | | | | |
| | | SN. TD. | | Dr, | Б0, | CF, | cu, | CI, | CPI, | GA, | GIV, | GQ, | GW, | rili, | PIK, |
| PD 160 | | SN, 1D, | | | 2006 | 0030 | | ED 2 | 004- | 0055 | 0.0 | | 2 | 0041 | 120 |
| | | BE, CH, | | | | | | | | | | | | | |
| P. | | SI, LT, | | | | | | | | | | | | | |
| | | IS, YU | Lv, | Е1, | . NO, | PIL. | C1, | AL, | IL, | DG, | C2, | EE, | no, | EL, | on, |
| TD 200 | | 4 | m | | 2007 | 0517 | | TD 0 | 000 | E 410 | 7.4 | | 2 | 0041 | 120 |
| | | 19 | | | | | | | | | | | | 0041
0060. | |
| PRIORITY AF | | | AI | | 2007 | 0215 | | FR 2 | | | | | | | |
| PRIORITY AL | PLN. I | NFO.: | | | | | | | | | | | | | |
| OFFIED COUR | | | | D 3 M | 1.12 | 0000 | | WO 2 | UU4- | rK30 | ьь | 1 | N 2 | 0041 | 130 |
| OTHER SOURC | E(S): | | MAR | PAT | 143: | 26631 | ь | | | | | | | | |
| GI | | | | | | | | | | | | | | | |

^{*} STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. I [wherein X = (CH2)n; n = 1-2; R1 = CF5; R2 = H, alkyl; R3 = (un)substituted pyrrolyl, 1,2,3-thiadiazolyl, pyrazinyl, etc.; and their salts, hydrates and solvates] were prepared as inhibitors of the binding of 1251 NGF to p75NTR (p75 neurotrophic) receptor and of the apoptosis induced by NGF (nerve growth factor) for treating p75NTR related diseases (no data). For example, II was prepared by reacting 1-14-(aminomethyl)-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4/C-pyrazinyl]-1-piperazinyl]-1 ethanone (preparation given) and 1-methyl-2-pyrrolecarboxaldehyda in THF in the presence of NaBHO(AO1/A/COH. I inhibited the binding of 1251 NGF to p75NTR receptor with ICSO in the range of 10-11 M to 10-6 M at the biochem level. I inhibited the pro-apoptic effect induced by NGF, via growing cells

expressing preferentially p75NTR, with IC50 in the range of 10-11~M to 10-6~M

at the cellular level.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD, ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 20 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2005:470968 CAPLUS Full-text

DOCUMENT NUMBER: 143:26635

TITLE: Preparation of (4-Phenylpiperazin-1-yl)acylpiperidine

derivatives as inhibitors of NGF binding (nerve growth factor) to p75NTR (p75 neurotrophic) receptor for

treating p75NTR related diseases

INVENTOR(S): Dos Santos, Victor; Wagnon, Jean

PATENT ASSIGNEE(S): Sanofi-Synthelabo, Fr.

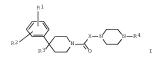
SOURCE: Fr. Demande, 49 pp. CODEN: FRXXBL

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

GI

| | TENT | | | | | | DATE | | | APPL | | | | | | ATE | |
|---------|------------------------|-----|-----|-----|-----|-----|------|-------|-----|-------|------|------|-----|-----|-----|------|-----|
| | 2862 | | | | | | 2005 | | | | | | | | | 0031 | |
| | 2862 | | | | | | 2006 | | | 111 2 | 005 | 141/ | | | - | 0031 | 201 |
| | 2005 | | | | | | | | | WO 2 | nn4= | FR30 | 67 | | 2 | 0041 | 130 |
| | | | | | | | AU, | | | | | | | | | | |
| | | | | | | | DE, | | | | | | | | | | |
| | | | | | | | ID, | | | | | | | | | | |
| | | | | | | | LV, | | | | | | | | | | |
| | | | | | | | PL, | | | | | | | | | | |
| | | | | | | | TZ, | | | | | | | | | | |
| | RW: | | | | | | MW, | | | | | | | | | | |
| | | | | | | | RU, | | | | | | | | | | |
| | | | | | | | GR, | | | | | | | | | | |
| | | | | | | | BJ, | | | | | | | | | | |
| | | NE. | SN, | TD. | TG | | | | | | | | | | | | |
| EP | 1699 | 778 | | | A1 | | 2006 | 0913 | | EP 2 | 004- | 8055 | 91 | | 2 | 0041 | 130 |
| | R: | AT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | GR, | IT, | LI, | LU, | NL, | SE, | MC, | PT, |
| | | IE, | SI, | LT, | LV, | FI | RO, | MK, | CY, | AL, | TR, | BG, | CZ, | EE, | HU, | PL, | SK, |
| | | HR, | IS | | | | | | | | | | | | | | |
| JP | JP 2007512385 | | | | T | | 2007 | 0517 | | JP 2 | 006- | 5419 | 75 | | 2 | 0041 | 130 |
| US | US 20070021609 | | | | A1 | | 2007 | 0125 | | US 2 | 006- | 4205 | 08 | | 2 | 0060 | 526 |
| PRIORIT | PRIORITY APPLN. INFO.: | | | | | | | | | FR 2 | 003- | 1417 | 3 | | A 2 | 0031 | 201 |
| | | | | | | | | | | WO 2 | 004- | FR30 | 67 | | W 2 | 0041 | 130 |
| OTHER S | HER SOURCE(S): | | | | | PAT | 143: | 2663. | 5 | | | | | | | | |



AB Title compds. I [wherein n = 1-2; R1 = halo, CF3, alkyl, alkoxy, OCF3; R2 = H, halo; R3 = H, OH and derivs., NH2 and derivs., etc.; R4 = (un)substituted Ph; their free bases, or acid addition salts, and their hydrates or solvates] were prepared as inhibitors of the binding of 1251 NGF to p75NTR (p75 neurotrophic) receptor and of the apoptosis induced by NGF (nerve growth factor) for treating p75NTR related diseases (no data). For example, II. HCl was prepared by reacting 2-chloro-1-[4-hydroxy-4-[3- (trifluoromethyl)phenyl]-1piperidinyl]-1-ethanone (preparation given) with 1-[3-

(trifluoromethyl)phenyl]piperazine in the presence of KI/K2CO3/MeCN. I inhibited the binding of 1251 NGF to p75NTR receptor with IC50 in the range of

10-11 M to 10-6 M at the biochem, level. I inhibited the pro-apoptic effect induced by NGF, via growing cells expressing preferentially p75NTR, with IC50 in the range of 10-11 M to 10-6 M at the cellular level.

REFERENCE COUNT: THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 21 OF 60 CAPLUS COPYRIGHT 2008 ACS on SIN ACCESSION NUMBER: 2005:451356 CAPLUS Full-text

DOCUMENT NUMBER: 143:7981

TITLE: Preparation of amino acid piperidinamides as

melanocortin receptor agonists

Lee, Koo; Park, Heui-Sul; Ahn, In-Ae; Yoo, Hvun-Ju; INVENTOR(S): Choi, Sung-Pil; Choi, Deog-Young; Yim, Hyeon-Joo;

Kwon, O-Hwan; Kondoh, Yutaka

PATENT ASSIGNEE(S): Lg Life Sciences Ltd., S. Korea; Yamanouchi

Pharmaceutical Co., Ltd.

PCT Int. Appl., 102 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

SOURCE:

| PATENT NO. | | | KIN | D | DATE | | 1 | APPL | ICAT | ION | NO. | | D | ATE | |
|------------|--------------|-----|-----|-----|------|------|-----|------|-------|------|-----|-----|-----|------|-----|
| | | | | - | | | | | | | | | - | | |
| WO 2005047 | O 2005047253 | | | | 2005 | 0526 | 1 | WO 2 | 004-1 | KR29 | 30 | | 2 | 0041 | 112 |
| W: AE | AG, | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BR, | BW, | BY, | BZ, | CA, | CH, |
| CN | . co, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | EG, | ES, | FΙ, | GB, | GD, |

```
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK,
            LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO,
            NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ,
            TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
        RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
            AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
            EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO,
            SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR,
            NE. SN. TD. TG
    KR 2005045927
                               20050517
                                          KR 2004-92245
                                           KR 2003-79800 A 20031112
PRIORITY APPLN. INFO.:
```

OTHER SOURCE(S):

MARPAT 143:7981

$$\mathbb{R}^1, \mathbb{N}^2 \longrightarrow \mathbb{R}^5 \mathbb{R}^4$$

AΒ The invention relates to amino acid derivs. I [R1 = H, (CH2)0-3-R6, (CH2)0-3CO-R6, (CH2)0-3SO2-R6, CO(CH2)0-3-R6; where R6 = (un)substituted alkv1, cycloalkyl, heterocyclyl, aryl, heteroaryl, amino or hydroxy; R2 = H, alkyl or cvcloalkvl; or R1R2N = heterocvclvl; R3 = (un)substituted alkvl, (CH2)0-3cycloalkyl, -Ph or -heteroaryl in which the rings may be substituted; R4 = Ph, cyclohexyl or an amino group; R5 = H, (CH2)0-3R7, where R7 = H, amino, OH, alkyl, acyl, carbamoyl, etc.], including pharmaceutically-acceptable salts, hydrates, solvates and isomers, which are effective agonists of the melanocortin receptor (MCR). Thus, (2R)-2-amino-N-[4-cyclohexyl-4-(tertbutylcarbamoyl)piperidin-1-yl]-3-(4- chlorophenyl)propionamide TFA salt was prepared via amidation reaction and showed EC50 = 0.005-0.5 µM and IC50 = 0.1-0.5 µM against MCR4.

REFERENCE COUNT:

INVENTOR(S):

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 22 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2005:369273 CAPLUS Full-text

DOCUMENT NUMBER: 142:430299

TITLE: Preparation of novel piperidine and

cyclohexanecarbonitrile derivatives effective in enhancing LDL receptor manifestation

Ban, Hitoshi; Ohnuma, Satoshi; Tsuboya, Norie; Asano,

Shigehiro

PATENT ASSIGNEE(S): Sumitomo Pharmaceuticals Co., Ltd., Japan

SOURCE: PCT Int. Appl., 209 pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

> PATENT NO. KIND DATE APPLICATION NO. DATE

```
WO 2005037269
                              20050428 WO 2004-JP15773
                         A1
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
            CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
            GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
            LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
            NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
            TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
        RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
            AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
            EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
            SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
            SN, TD, TG
    EP 1679069
                               20060712
                                         EP 2004-792910
                                                                  20041019
                         A1
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK
    US 20070078120
                        A1
                               20070405
                                           US 2006-576581
                                                                  20060420
PRIORITY APPLN. INFO.:
                                           JP 2003-361256
                                                             A 20031021
                                           WO 2004-JP15773
                                                             W 20041019
OTHER SOURCE(S):
                       MARPAT 142:430299
GI
```

$$\begin{bmatrix} R^{1} - X \\ R^{4} - R^{5} \end{bmatrix}_{n} \begin{bmatrix} R^{6} - R \end{bmatrix}_{p} \begin{bmatrix} Z \\ R^{4} - R \end{bmatrix}_{p}$$

AB Drugs for enhancing LDL receptor manifestation contains compds. represented by the following formula (I), prodrugs thereof, or pharmaceutically acceptable salts of either [m, n, p = 0-4, provided that $3 \le m + n \le 8$; X = N, each (un) substituted CH; Y = each (un) substituted alkyl, alkenyl, alkynyl, cycloalkyl, or aromatic group, COY; R1 = H, each (un)substituted alkyl, alkenyl, alkynyl, cycloalkyl, 3- to 8-membered saturated heterocyclyl containing one (un)substituted NH or O, aromatic group, COR14; R14 = each (un)substituted alkyl, alkenyl, alkynyl, cycloalkyl, or aromatic group; R2-R7 = H, OH, each (un)substituted alkyl, alkoxy, alkoxycarbonyl, aralkyl, heteroarylalkyl, aralkyloxy, or heteroarylalkyloxy; or one or a plural combination of R2 and R3, R4 and R5, or R6 and R7 = oxo; or R2 and R4 together = alkylene; two of R2-R5 are on the adjacent carbon atom to form a double bond; Z = H, OH, CO2H, cyano, phthalimido, halo, each (un) substituted alkyl, alkenyl, alkynyl, cycloalkyl, or aromatic group, etc.] as active ingredients. These compds. are effective in enhancing low d. lipoprotein (LDL) receptor manifestation and lowering blood concentration of LDL cholesterol and are useful as therapeutic agents for treating hyperlipemia and arteriosclerosis. Thus, 0.019 mL benzyl bromide was added to a suspension of 40 mg 4-(3methoxyphenyl)-1,4'- bipiperidine-4-carbonitrile dihydrochloride and 92.6 mg K2CO3 in 1.0 mL DMF under ice-cooling, and the resulting mixture was warmed to room temperature, stirred overnight, and quenched by adding water to give, after workup and silica gel chromatog., 15.6 mg 1'-benzvl-4-(3-methoxyphenvl)-1,1'- bipiperidine-4-carbonitrile (II). II at 10 µM and N-benzyl-4-(3methoxyphenyl)-1-(pyrimidin-2-yl)piperidine-4-carbothioamide at 3 μM enhanced the LDL receptor activity by 135 and 195%, resp. REFERENCE COUNT: 59 THERE ARE 59 CITED REFERENCES AVAILABLE FOR THIS

L5 ANSWER 23 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:220128 CAPLUS Full-text
DOCUMENT NUMBER: 142:298111

DOCUMENI NUMBER: 142;29811

TITLE: Preparation of 2-substituted benzimidazole piperidines as selective melanin concentrating hormone receptor

antagonists for the treatment of obesity and related disorders

INVENTOR(S): Burnett, Duane A.; Wu, Wen-Lian; Sasikumar,

KIND DATE

Thavalakulamgara K.; Greenlee, William J.; Caplen,

APPLICATION NO.

DATE

Mary Ann; Guo, Tao; Hunter, Rachael Catherine

PATENT ASSIGNEE(S): USA

U.S. Pat. Appl. Publ., 57 pp.

SOURCE: U.S. Pat. App.
CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| | | | | | | _ | | | | | | | | | | | | |
|----|------|------|-----|-----|-----|-----|------|------|-----|------|-------|------|-----|-----|-----|------|-----|--|
| US | 2005 | 0054 | 628 | | A1 | | 2005 | 0310 | | US 2 | 004- | 9265 | 57 | | 2 | 0040 | 826 | |
| CA | 2536 | 929 | | | A1 | | 2005 | 0317 | | CA 2 | 004- | 2536 | 929 | | 2 | 0040 | 826 | |
| WO | 2005 | 0237 | 98 | | A1 | | 2005 | 0317 | | WO 2 | 004-1 | US27 | 734 | | 2 | 0040 | 826 | |
| | W: | ΑE, | AG, | AL, | AM, | ΑT, | AU, | ΑZ, | BA, | BB, | BG, | BR, | BW, | BY, | ΒZ, | CA, | CH, | |
| | | CN, | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | EG, | ES, | FI, | GB, | GD, | |
| | | GE, | GH, | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | KP, | KR, | ΚZ, | LC, | |
| | | LK, | LR, | LS, | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | ΜZ, | NA, | NI, | |
| | | NO, | ΝZ, | OM, | PG, | PH, | PL, | PT, | RO, | RU, | SC, | SD, | SE, | SG, | SK, | SL, | SY, | |
| | | ΤJ, | TM, | TN, | TR, | TT, | TZ, | UA, | UG, | US, | UΖ, | VC, | VN, | YU, | ZA, | ZM, | ZW | |
| | RW: | BW, | GH, | GM, | KΕ, | LS, | MW, | ΜZ, | NA, | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW, | AM, | |
| | | | | | | | | | | ΑT, | | | | | | | | |
| | | EE, | ES, | FI, | FR, | GB, | GR, | HU, | ΙE, | IT, | LU, | MC, | NL, | PL, | PT, | RO, | SE, | |

SN, TD, TG

EP 1664022

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,

IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PI, SK, HC

CN 1845916

A 20061011

CN 2004-8024937

20040826

SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,

JP 2007504146 T 20070301 JP 2006-524846 20040826 MX 2006PA02372 A 20060620 MX 2006-PA2372 20060228 PRIORITY APPLN. INFO: US 2003-498876P P 20030829 WO 2004-US27734 W 20040826

OTHER SOURCE(S): CASREACT 142:298111; MARPAT 142:298111

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. I [Y = bond, divalent alkyl, etc.; M = 0-1; n = 0, 2, 3; Ar = (heterolaryl, R1 = H, alkyl, cycloalkyl, etc.; R4 = 0H, alkoxy, etc.] are prepared For instance, II is prepared in 9 steps from 4-aminomethyl-1-benzyl-4-phenylpiperidine, 4,5-difluorobenzene-1,2-diamine and 3-cyanobenzeneboronic acid. In a selected example, a Ki of 3 nM for the melanin concentrating hormone (MCH) receptor is observed I are useful in treating obesity, metabolic disorders, eating disorders, e.g., hyperphagia and diabetes.

L5 ANSWER 24 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2005:160818 CAPLUS Fuil-text

DOCUMENT NUMBER: 142:261735

TITLE: Preparation of lincomycin derivatives as antibacterial agents

INVENTOR(S): Lewis, Jason G.; Anandan, Sampath-Kumar; O'Dowd,

Hardwin; Gordeev, Mikhail F.
PATENT ASSIGNEE(S): Vicuron Pharmaceuticals, Inc., USA

SOURCE: U.S. Pat. Appl. Publ., 125 pp., Cont.-in-part of U.S.

Ser. No. 777,455. CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 6
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | | DATE |
|------------------------|------|----------|-----------------|----|----------|
| US 20050043248 | A1 | 20050224 | US 2004-871618 | _ | 20040617 |
| US 7199106 | B2 | 20070403 | | | |
| US 20040116690 | A1 | 20040617 | US 2003-642807 | | 20030815 |
| US 7164011 | B2 | 20070116 | | | |
| US 20040230046 | A1 | 20041118 | US 2004-777455 | | 20040211 |
| US 7199105 | B2 | 20070403 | | | |
| US 20050215488 | A1 | 20050929 | US 2004-992564 | | 20041117 |
| US 7256177 | B2 | 20070814 | | | |
| US 20060148722 | A1 | 20060706 | US 2005-217836 | | 20050831 |
| US 7361743 | B2 | 20080422 | | | |
| PRIORITY APPLN. INFO.: | | | US 2003-479296P | P | 20030617 |
| | | | US 2003-479502P | P | 20030617 |
| | | | US 2003-642807 | A2 | 20030815 |
| | | | US 2004-777455 | A2 | 20040211 |
| | | | US 2002-403770P | P | 20020815 |
| | | | US 2004-871618 | A2 | 20040617 |
| | | | US 2004-992564 | A2 | 20041117 |
| | | | | | |

OTHER SOURCE(S): MARPAT 142:261735

AB Lincomycin derivs. I, wherein the delocalized bond represents a double bond or a single bond; RI is alkyl, SMe, S-alkyl, S-(2-hydroxyethyl), (heteroaryl)alkyl, H, halogen, alkyl-sulfanyl, alkenyl, alkoxy, cycloalkyl-alkyl; R2 and R3 are independently H, alkyl, alkenyl, alkoxy, CN, alkyl-

sulfanyl, OH, halo, oxime; R6 is H, alkyl, (carboxamide)alkyl, (carbamoyl)alkyl, alkoxycarbonyl, (alkoxycarbonyl)alkyl, (alkoxycarbonylamino)alkyl, amine; R9 is H, alkyl, halo, alkenyl, (heteroaryl)alkenyl, sulfonyl, X is (CH2)m; m is 0-2; t is 0-3; are prepared as antibacterial agents. The compds. of the subject invention may exhibit potent activities against bacteria, including gram pos. organisms, and may be useful antimicrobial agents. Methods of synthesis and of use the compds. are also disclosed. Title compds. have a min. inhibition concentration of 32 ug/mL or less against at least one of the organisms selected from the group consisting of Streptococcus pneumoniae, Staphylococcus aureus, Staphylococcus epidermidis, Enterococcusfaecalis, Enterococcusfaecium, Haemophilus influenzae, Moraxella catarrhalis, Escherichia coli, Bacteroidesfragilis, and Clostridium difficile. Thus, aminodeoxy glycoside II was prepared and tested in vitro as antibacterial agent.

REFERENCE COUNT: 101 THERE ARE 101 CITED REFERENCES AVAILABLE FOR

THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 25 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2005:120944 CAPLUS Full-text

DOCUMENT NUMBER: 142:240671 TITLE:

Preparation of lincomycin derivatives as antibacterial agents

INVENTOR(S): Lewis, Jason G.; Anandan, Sampath K.; O'dowd, Hardwin;

Gordeev, Mikhail F. Vicuron Pharmaceuticals, Inc., USA

PATENT ASSIGNEE(S): SOURCE: PCT Int. Appl., 284 pp.

CODEN: PIXXD2 DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 6

PATENT INFORMATION:

| | TENT | | | | | | | | | | | | | | | | | |
|----|------|------|-----|-----|-----|-----|------|------|-----|------|------|------|-----|-----|-----|------|-----|----|
| | 2005 | | | | | | | | | | | | | | | | | |
| | W: | ΑE, | | | | | | | | | | | | | | | | |
| | | CN, | co, | CR, | CU, | CZ, | DE, | DK, | DM, | DΖ, | EC, | EE, | EG, | ES, | FI, | GB, | GD, | |
| | | GE, | GH, | GM, | HR, | ΗU, | ID, | IL, | IN, | IS, | JP, | KΕ, | KG, | ΚP, | KR, | ΚZ, | LC, | |
| | | | | | | | LV, | | | | | | | | | | | |
| | | | | | | | PL, | | | | | | | | | | | |
| | | | | | | | TZ, | | | | | | | | | | | |
| | RW: | BW, | | | | | | | | | | | | | | | | |
| | | | | | | | RU, | | | | | | | | | | | |
| | | | | | | | GR, | | | | | | | | | | | |
| | | | | | | ВJ, | CF, | CG, | CI, | CM, | GA, | GN, | GQ, | GW, | ML, | MR, | ΝE, | |
| | | | TD, | | | | | | | | | | | | | | | |
| | 2004 | | | | | | | | | US 2 | 003- | 6428 | 07 | | 2 | 0030 | 815 | |
| | 7164 | | | | | | 2007 | | | | | | | | | | | |
| | 2004 | | | | | | | | | US 2 | 004- | 7774 | 55 | | 2 | 0040 | 211 | |
| | 7199 | | | | | | | | | | | | | | | | | |
| | 2004 | | | | | | | | | | | | | | | | | |
| | 2528 | | | | | | | | | | | | | | | | | |
| EP | 1644 | | | | | | | | | | | | | | | | | |
| | R: | | | | | | | | | | | | | | | | | |
| | | | | | | | RO, | | | | | | | | | | | HR |
| | 2004 | | | | | | | | | | | | | | | | | |
| | 1823 | | | | | | | | | | | | | | | | | |
| | 2007 | | | | | | | | | | | | | | | | | |
| NO | 2005 | 0058 | 93 | | A | | 2006 | 0314 | | NO 2 | 005- | 5893 | | | 2 | 0051 | 212 | |

MX 2005PA13915 20060703 MX 2005-PA13915 20051216 Α PRIORITY APPLN. INFO .: US 2003-479296P P 20030617 US 2003-479502P P 20030617 US 2003-642807 A 20030815 US 2004-777455 A 20040211 US 2002-403770P D 20020815 WO 2004-US19689 W 20040617

OTHER SOURCE(S): CASREACT 142:240671; MARPAT 142:240671

GI

AB Lincomycin derivs. I, wherein the delocalized bond represents a double bond or a single bond; R1 is alkyl, SMe, S-alkyl, S-(2-hydroxyethyl), (heteroaryl)alkyl, H, halogen, alkylsulfanyl, alkenyl, alkoxy, cycloalkylalkyl; R2 R3 are independently H, alkyl, alkenyl, alkoxy, CN, alkylsulfanyl, OH, halo, oxime; R6 is H, alkyl, (carboxamido)alkyl, (carbamoyl)alkyl, alkoxycarbonyl, (alkoxycarbonyl)alkyl, (alkoxycarbonyl-amino)alkyl, amine: R9 is H, alkyl, halo, alkenyl, (heteroaryl)alkenyl, sulfonyl, X is (CH2)m; m is 0-2; t is 0-3; are prepared as antibacterial agents. The compds. of the subject invention may exhibit potent activities against bacteria, including gram pos. organisms, and may be useful antimicrobial agents. Methods of synthesis and of use the compds, are also disclosed. Title compds, have a min. inhibition concentration of 32 $\mu g/mL$ or less against at least one of the organisms selected from the group consisting of Streptococcus pneumoniae, Staphylococcus aureus, Staphylococcus epidermidis, Enterococcusfaecalis, Enterococcusfaecium, Haemophilus influenzae, Moraxella catarrhalis, Escherichia coli, Bacteroidesfragilis, and Clostridium difficile. Thus, aminodeoxy glycoside II was prepared and tested in vitro as antibacterial agent.

L5 ANSWER 26 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2005:14219 CAPLUS Full-text

DOCUMENT NUMBER: 142:114065

TITLE: Preparation of benzene and phenol derivatives as inhibitors of sensory neuron specific (SNS) sodium

channels

INVENTOR(S): Jennings, Neil Stuart; Stokes, Stephen; Hamlyn,

Richard John; Tickle, David Christopher; Huckstep, Michael Richard; Lynch, Rosemary; Knutsen, Lars Jacob

Stray

PATENT ASSIGNEE(S): Ionix Pharmaceuticals Limited, UK

PCT Int. Appl., 96 pp. SOURCE:

CODEN: PIXXD2 Patent

LANGUAGE:

English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

DOCUMENT TYPE:

| PAT | ENT | NO. | | | KIN | D | DATE | | | APPL | ICAT | ION | NO. | | D. | ATE | |
|------|------|-----|------|-----|--------|-----|------|------|-----|----------|------|----------|-----|-----|-----|------|-----|
| | 2005 | | | |
A2 | - | 2005 | 0106 | |
WO 2 | |
GB26 | | | - 2 | 0040 | |
| | 2005 | | | | A3 | | 2005 | | | | 001 | ODEO | , | | _ | 0040 | 0 1 |
| | W: | ΑE, | AG, | AL, | AM, | ΑT, | AU, | ΑZ, | BA, | BB, | BG, | BR, | BW, | BY, | ΒZ, | CA, | CH, |
| | | CN, | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | EG, | ES, | FI, | GB, | GD, |
| | | GE, | GH, | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | KP, | KR, | KZ, | LC, |
| | | LK, | LR, | LS, | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | MZ, | NA, | NI, |
| | | NO, | NZ, | OM, | PG, | PH, | PL, | PT, | RO, | RU, | SC, | SD, | SE, | SG, | SK, | SL, | SY, |
| | | TJ, | TM, | TN, | TR, | TT, | TZ, | UA, | UG, | US, | UZ, | VC, | VN, | YU, | ZA, | ZM, | ZW |
| | RW: | BW, | GH, | GM, | KE, | LS, | MW, | MZ, | NA, | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW, | AM, |
| | | AZ, | BY, | KG, | KZ, | MD, | RU, | TJ, | TM, | AT, | BE, | BG, | CH, | CY, | CZ, | DE, | DK, |
| | | EE, | ES, | FI, | FR, | GB, | GR, | HU, | IE, | IT, | LU, | MC, | NL, | PL, | PT, | RO, | SE, |
| | | SI, | SK, | TR, | BF, | ВJ, | CF, | CG, | CI, | CM, | GA, | GN, | GQ, | GW, | ML, | MR, | NE, |
| | | SN, | TD, | TG | | | | | | | | | | | | | |
| RITY | APP | LN. | INFO | . : | | | | | | GB 2 | 003- | 1513 | 9 | | A 2 | 0030 | 627 |
| | | | | | | | | | | | | | | | - ^ | | |

PRIOR

GB 2003-15140 A 20030627 US 2003-485742P P 20030710 US 2003-485743P P 20030710

OTHER SOURCE(S): MARPAT 142:114065

GT

AB Benzenes I [wherein each R1 independently is halo, alk(yl/oxy), alkylthio, hydroxy, amino or (di)alkylamino; n is 0-3; X1 is a direct bond or -L-O/S/NR'-L1-; L and L1 are direct bond or alkylene; R' is H or alkyl; Ar is 5/6membered heteroaryl or Ph group; X2 is a direct bond -L2-O/S/NR'-, C(O) or S(O); L2 is a direct bond or alkylene; Y is alkylene, alkyl, Ph or hetero(aryl/cyclyl); et al., with some limitations], phenol derivs. II [wherein R1 = H, alkyl, (hetero)aryl or (hetero)cyclyl; each R2 independently = alkyl, halo, alkoxy, alkylthio, OH, NO2, cyano, amino or (di)alkylamino; R3 = H, alkyl, or links with R4; R4 = H, alkyl, (hetero)aryl or (hetero)cyclyl; n = 0-4; X = CH2, C(0), S(0), S(0)2; Het = heteroaryl or heterocyclyll, and pharmaceutically acceptable salts thereof were prepared as inhibitors of sensory neuron specific (SNS) sodium channels. For example, reductive amination of 4-benzyloxybenzaldehyde with 1-(S)-(5-methylthiazol-2-yl)ethylamine triflooroacetate (preparation given) in the presence of triethylamine and sodium cyanoborohydride gave III in 27% yield, which showed IC50 of 3.83 µM against human Navl.8 ion channel. Therefore, the invented compds. and pharmaceutical compns. thereof are useful as analgesic and neuroprotective agents.

L5 ANSWER 27 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2004:999707 CAPLUS Full-text

DOCUMENT NUMBER: 141:424382

TITLE: Preparation of lincomycin thio glycoside derivatives possessing antibacterial activity

INVENTOR(S): Lewis, Jason G.; Patel, Dinesh V.; Anandan, Sampath Kumar; Gordeev, Mikhail F.

PATENT ASSIGNEE(S): Vicuron Pharmaceuticals Inc., USA

Patent

SOURCE: U.S. Pat. Appl. Publ., 102 pp., Cont.-in-part of U.S. Ser. No. 642.807.

CODEN: USXXCO

DOCUMENT TYPE:

LANGUAGE: English FAMILY ACC. NUM. COUNT: 6

PATENT INFORMATION:

| | TENT : | | | | KIN | | DATE | | | | | | | | | ATE | |
|----|--------|------|-----|-----|-----|-----|------|------|-----|------|------|------|-----|-----|-----|------|-----|
| | 2004 | | | | A1 | | 2004 | 1118 | | | | 7774 | | | | 0040 | |
| | 7199 | | | | B2 | | 2007 | | | | | | | | | | |
| US | 2004 | 0116 | 690 | | | | 2004 | 0617 | | US 2 | 003- | 6428 | 07 | | 2 | 0030 | 815 |
| US | 7164 | 011 | | | B2 | | 2007 | 0116 | | | | | | | | | |
| | 2528 | | | | | | 2005 | | | | | 2528 | | | 2 | | |
| | 2005 | | | | | | | | | WO 2 | 004- | US19 | 497 | | 2 | 0040 | 617 |
| WO | 2005 | | | | | | 2005 | | | | | | | | | | |
| | W: | | | | | | ΑU, | | | | | | | | | | |
| | | | | | | | DE, | | | | | | | | | | |
| | | | | | | | ID, | | | | | | | | | | |
| | | | | | | | LV, | | | | | | | | | | |
| | | | | | | | PL, | | | | | | | | | | |
| | | | | | | | TZ, | | | | | | | | | | |
| | RW: | | | | | | MW, | | | | | | | | | | |
| | | | | | | | RU, | | | | | | | | | | |
| | | | | | | | GR, | | | | | | | | | | |
| | | | | | BF, | ΒJ, | CF, | CG, | CI, | CM, | GA, | GN, | GQ, | GW, | ML, | MR, | NE |
| | | | TD, | | | | | | | | | | | | | | |
| | 2004 | | 50 | | | | 2005 | | | | | | | | | | |
| | 2528 | | | | A1 | | 2005 | | | | | | | | 2 | | |
| WO | 2005 | | | | | | 2005 | | | | | | | | | 0040 | |
| | W: | | | | | | AU, | | | | | | | | | | |
| | | | | | | | DE, | | | | | | | | | | |
| | | | | | | | ID, | | | | | | | | | | |
| | | | | | | | LV, | | | | | | | | | | |
| | | | | | | | PL, | | | | | | | | | | |
| | | | | | | | TZ, | | | | | | | | | | |
| | RW: | | | | | | MW, | | | | | | | | | | |
| | | | | | | | RU, | | | | | | | | | | |
| | | | | | | | GR, | | | | | | | | | | |
| | | SI, | SK, | TR, | ВF, | ВJ, | CF, | CG, | CI, | CM, | GΑ, | GN, | GQ, | G₩, | ML, | MR, | NE |

| | SN, TD, | TG | | | |
|----------|-------------|--------|----------------|------------------------------------|--------------------|
| US | 20050043248 | Z | 1 20050224 | US 2004-871618 | 20040617 |
| US | 7199106 | 1 | 32 20070403 | | |
| EP | 1644393 | Z | 12 20060412 | EP 2004-776816 | 20040617 |
| | R: AT, BE, | CH, DI | E, DK, ES, FR, | GB, GR, IT, LI, LU, | NL, SE, MC, PT, |
| | IE, SI, | LT, LV | 7, FI, RO, MK, | CY, AL, TR, BG, CZ, | EE, HU, PL, SK, HR |
| EP | 1654268 | i | 12 20060510 | EP 2004-785949 | 20040617 |
| | R: AT, BE, | CH, DI | E, DK, ES, FR, | GB, GR, IT, LI, LU, | NL, SE, MC, PT, |
| | IE, SI, | FI, R | CY, TR, BG, | CZ, EE, HU, PL, SK | |
| BR | 2004011537 | ž | 20060801 | BR 2004-11537 | 20040617 |
| BR | 2004011534 | ž. | 1 20060822 | BR 2004-11534 | 20040617 |
| CN | 1823083 | ž. | 20060823 | CN 2004-80020301
JP 2006-517464 | 20040617 |
| JP | 2007516172 | | 20070621 | JP 2006-517464 | 20040617 |
| JP | 2007528360 | | 20071011 | JP 2006-517386 | 20040617 |
| US | 20050215488 | 1 | 1 20050929 | US 2004-992564 | 20041117 |
| US | 7256177 | 3 | 32 20070814 | | |
| US | 20060148722 | ž | 1 20060706 | US 2005-217836 | 20050831 |
| US | 7361743 | 3 | 32 20080422 | | |
| NO | 2005005893 | 2 | 20060314 | | |
| MX | 2005PA13915 | 2 | 20060703 | MX 2005-PA13915 | 20051216 |
| MX | 2005PA14064 | 1 | 20060711 | | |
| PRIORITY | APPLN. INFO | .: | | US 2002-403770P | |
| | | | | US 2003-479502P | P 20030617 |
| | | | | US 2003-642807 | A2 20030815 |
| | | | | US 2003-479296P | P 20030617 |
| | | | | WO 2003-US25820 | A 20030815 |
| | | | | US 2004-777455 | A 20040211 |
| | | | | US 2004-871618 | A2 20040617 |
| | | | | WO 2004-US19497 | |
| | | | | WO 2004-US19689 | W 20040617 |
| | | | | US 2004-992564 | A2 20041117 |
| | | | | | |

OTHER SOURCE(S): MARPAT 141:424382

GI

AB Lincomycin thio glycoside derivs. I, wherein R1 is alky1, R2 and R3 are independently H, alky1, hydroxy, fluoro, or cyanoalky1 or one of R2 and R3 is = NOR7 and the other is absent, or one of R2 and R3 is = CH2 and the other is absent, with the proviso that both R2 and R3 are not H; when one of R2 and R3 is fluoro, the other is not hydrogen or hydroxy; and when one of R2 and R3 is hydroxy, the other is not fluoro, hydroxyalky1, -C(0)O-alkylen-cycloalky1, -C(0)O-alkylen-cycloalky1, -C(0)O-alkylen-cycloalky1, -C(0)O-alky1, -C(0)O-substituted alky1, -C(0)O-avp1, -C(0)O-substituted alky1, -C(0)O-abstituted alky1, -C(0)O-alky1, -C(0)O-substituted heteroary1, -(C(0)O-gly-alkylen-cyclo)O-substituted heteroary1, -(C(0)O-gly-alkylen-cyclo)O-substituted heteroary2, -(C(0)O-gly-alkylen-cyclo)O-substituted heteroary3, -(C(0)O-gly-alkylen-cyclo)O-substituted heteroary4, -(C(0)O-gly-alkylen-cyclo)O-s

nitrogen, halogen, Ph, substituted Ph, -(CH2)m-OH, -(CH2)m-NR4R5, -alkylene-Ra where Ra is monofluorophenyl and monochlorophenyl, and branched chain isomers thereof wherein m is an integer of from 1 to 8 inclusive and R4 and R5 are H or alkyl; n is 1 or 2; are disclosed. These lincomycin derivs. exhibit antibacterial activity. As the compds. of the subject invention exhibit potent activities against bacteria, including gram pos. organisms, they are useful antimicrobial agents. Methods of synthesis and of use of the compds. are also disclosed. Prodrugs, tautomers or pharmaceutically acceptable salts thereof; with the proviso that the compound of formula I has a min, inhibition concentration of 32 ug/mL or less against at least one of the organisms selected from the group consisting of Streptococcus pneumoniae, Staphylococcus aureus, Staphylococcus epidermidis, Enterococcus faecalis, Enterococcus faecium, Haemophilus influenzae, Moraxella catarrhalis, Escherichia coli, Bacteroides fragilis, Bacteroides thetaiotaomicron, and Clostridium difficile. Thus, 1-(4-n-propyl-N- methylpyrrolidin-2-yl)-N-[1-[3,4,5-trihydroxy-6-(methylthio)tetrahydropyran-2-yl]-2-methylprop-1-yl]acetamide was prepared and tested in mice as antibacterial agent. 106

REFERENCE COUNT:

THERE ARE 106 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 28 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2004:252507 CAPLUS Full-text

DOCUMENT NUMBER: 140:287409

TITLE: Preparation of carbamoylpiperazines as melanocortin-4

receptor agonists INVENTOR(S): Bakshi, Raman Kumar; Narqund, Ravi P.; Palucki, Brenda

L.; Park, Min K.; Ye, Zhixiong

PATENT ASSIGNEE(S): Merck & Co., Inc., USA

PCT Int. Appl., 154 pp. SOURCE: CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| 1 | | ENT | | | | KIN | | DATE | | | | ICAT | | | | D. | ATE | |
|-------|----|------|------|------|-----|------|-----|------|-------|-----|------|-------|------|-----|-----|-----|------|-----|
| 1 | WO | 2004 | 0247 | 20 | | A1 | | 2004 | 0325 | | WO 2 | 003- | US27 | 892 | | 2 | 0030 | 905 |
| | | W: | ΑE, | AG, | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BR, | BY, | BZ, | CA, | CH, | CN, |
| | | | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | ES, | FI, | GB, | GD, | GE, | GH, |
| | | | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | KR, | KZ, | LC, | LK, | LR, | LS, |
| | | | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | MZ, | NI, | NO, | NZ, | OM, | PG, |
| | | | PH, | PL, | PT, | RO, | RU, | SC, | SD, | SE, | SG, | SK, | SL, | SY, | TJ, | TM, | TN, | TR, |
| | | | TT, | TZ, | UA, | UG, | US, | UZ, | VC, | VN, | YU, | ZA, | ZM, | ZW | | | | |
| | | RW: | GH, | GM, | KE, | LS, | MW, | MZ, | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW, | AM, | AZ, | BY, |
| | | | KG, | KZ, | MD, | RU, | TJ, | TM, | AT, | BE, | BG, | CH, | CY, | CZ, | DE, | DK, | EE, | ES, |
| | | | FI, | FR, | GB, | GR, | HU, | IE, | IT, | LU, | MC, | NL, | PT, | RO, | SE, | SI, | SK, | TR, |
| | | | BF, | ВJ, | CF, | CG, | CI, | CM, | GA, | GN, | GQ, | GW, | ML, | MR, | NE, | SN, | TD, | TG |
| | CA | 2498 | 272 | | | A1 | | 2004 | 0325 | | CA 2 | 003- | 2498 | 272 | | 2 | 0030 | 905 |
| 1 | AU | 2003 | 2684 | 93 | | A1 | | 2004 | 0430 | | AU 2 | 003- | 2684 | 93 | | 2 | 0030 | 905 |
| 1 | EΡ | 1539 | 735 | | | A1 | | 2005 | 0615 | | EP 2 | 003- | 7494 | 59 | | 2 | 0030 | 905 |
| | | R: | AT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | GR, | IT, | LI, | LU, | NL, | SE, | MC, | PT, |
| | | | IE, | SI, | LT, | LV, | FI, | RO, | MK, | CY, | AL, | TR, | BG, | CZ, | EE, | HU, | SK | |
| | JP | 2006 | 5055 | 31 | | T | | 2006 | 0216 | | JP 2 | 004 - | 5361 | 16 | | 2 | 0030 | 905 |
| 1 | US | 2006 | 0040 | 906 | | A1 | | 2006 | 0223 | | US 2 | 005- | 5261 | 78 | | 2 | 0050 | 228 |
| PRIOR | IΤ | APP | LN. | INFO | . : | | | | | | US 2 | 002- | 4098 | 79P | 1 | P 2 | 0020 | 911 |
| | | | | | | | | | | | WO 2 | 003- | US27 | 892 | 1 | W 2 | 0030 | 905 |
| OTHER | SC | URCE | (S): | | | MARI | PAT | 140: | 28740 | 19 | | | | | | | | |

OTHER SOURCE(S):

MARPAT 140:287409

AB Piperazines I [R1 = H, (un)substituted alkyl, cycloalkyl, aryl, heteroaryl; R2 = H, (un)substituted alkyl, aryl, cycloalkyl, heterocyclyl, heteroaryl, CH2C.tplbond.CH, CH2CHF2; R3-R10 = H, (un)substituted alkyl, aryl, cycloalkyl, heterocyclyl, heteroaryl; R3R5, R3R9, R5R7, R7R9 = atoms required to complete a 5-7-membered ring; X = (un)substituted alkyl, cycloalkyl, aryl, heteroaryl, heterocyclyl, CN, CONH2, CO2H, acyl, NH2, SH, s(O)H, SO2H, OH; Y = H, (un) substituted alkyl, alkenyl, cycloalkyl, aryl, heteroaryl, heterocyclyl; m = 1, 2] were prepared for use as agonists of the human melanocortin-4 receptor (MC-4R) and, in particular, as receptor-subtype selective agonists of MC-4R. They are useful for the treatment, control, or prevention of diseases and disorders responsive to the activation of MC-4R, such as obesity and diabetes. Thus, (R)-4-FC6H4CH2CH(CO2H)NHCO2CMe3 was treated with 1-cyclohexyl-4-tert.butoxycarbamovlpiperidine hydrochloride, followed by deblocking and reaction with cis-2,6-dimethylpiperazine to give the title compound II. 1

REFERENCE COUNT: THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 29 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2004:162704 CAPLUS Full-text DOCUMENT NUMBER: 140:199635

TITLE:

Preparation of lincomycin thio glycoside derivatives

possessing antibacterial activity Lewis, Jason; Patel, Dinesh V.; Kumar, Anandan S.;

Gordeev, Mikhail F.

PATENT ASSIGNEE(S): Vicuron Pharmaceuticals, Inc., USA; Anandan, Sampath

SOURCE: PCT Int. Appl., 143 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

INVENTOR(S):

PATENT NO. APPLICATION NO. DATE KIND DATE

| MO | 2004 | 0166 | 3.2 | | A2 | | 2004 | n226 | | ы∩ 2 | 003- | HS25 | 820 | | 2 | 0030 | 815 |
|---------|---------|------|-----|-----|------|----|------|------|-----|------|------|------|-----|------|-----|-------|-----|
| | 2004 | | | | A3 | | 2004 | | | WO Z | 005- | 0525 | 020 | | 2 | 0030 | 013 |
| | W: | | | AL. | | | | | BA. | BB. | BG, | BR. | BY. | BZ. | CA. | CH. | CN. |
| | | | | | | | | | | | EE, | | | | | | |
| | | | | | | | | | | | KG, | | | | | | LR, |
| | | | | | | | | | | | MW, | | | | | | |
| | | | | | | | | | | | SG, | | | | | | TN, |
| | | | | | | | | | | | YU, | | | ZW | , | , | , |
| | RW: | | | | | | | | | | TZ, | | | | AM. | A7. | BY. |
| | | | | | | | | | | | CH, | | | | | | |
| | | | | | | | | | | | NL, | | | | | | TR, |
| | | | | | | | | | | | GW, | | | | | | |
| CA | 2493 | | 20, | 02, | A1 | | 2004 | | | | 003- | | | , | | 0030 | |
| | 2003 | | 75 | | A1 | | 2004 | | | | 003- | | | | | 0030 | |
| | 1529 | | | | A2 | | 2005 | | | | 003- | | | | | 0030 | |
| | R: | | BE | CH | | | | | | | IT, | | | NIT. | | | |
| | • • • • | | | | | | | | | | TR, | | | | | | , |
| CN | 1681 | | 01/ | ш., | A | | 2005 | | | | 003- | | | , | | 0030 | 815 |
| | 2006 | | 73 | | T | | | 0209 | | | 004- | | | | | 0030 | |
| | 2003 | | | | Ā | | 2006 | | | | 003- | | | | | 0030 | |
| | 5381 | | | | A | | 2007 | | | | 003- | | | | | 0030 | |
| | 2528 | | | | A1 | | | 0127 | | | 004- | | | | | 0040 | |
| | 2005 | | 6.5 | | A2 | | 2005 | | | | 004 | | | | | 0040 | |
| | 2005 | | | | A3 | | 2005 | | | WO 2 | 001 | 0017 | 101 | | - | 0010 | 01, |
| "" | W: | | | AT | | | | | BA. | BB. | BG, | BR. | BW. | BY. | B7. | CA. | CH. |
| | | | | | | | | | | | EC, | | | | | | GD, |
| | | | | | | | | | | | JP, | | | | | | LC, |
| | | | | | | | | | | | MK, | | | | | NA, | NI, |
| | | NO. | | | | | | | | | SC, | | | | | SL, | SY, |
| | | TJ, | TM, | | | | | | | | UZ, | | | | | ZM, | ZW |
| | DM. | | | | | | | | | | SL, | | | | | ZW. | |
| | 1011. | AZ. | | | | | | | | | BE, | | | | | DE, | |
| | | EE, | | | | | | | | | LU, | | | | | | |
| | | SI, | | | | | | | | | GA, | | | | | | |
| | | | TD, | | D1 , | ъ, | CI, | co, | C1, | CH | Ori, | OI4, | 00, | On, | и., | LILY, | мы, |
| ED | 1654 | | 10, | | A2 | | 2006 | 0510 | | EP 2 | 004- | 7859 | 49 | | 2 | 0040 | 617 |
| | R: | | BE | CH | | | | | | | IT, | | | NIT. | | | |
| | | | | | | | | | | | HU, | | | 1111 | 02, | 1.07 | , |
| BR | 2004 | | | , | A | | 2006 | | | | 004- | | | | 2 | 0040 | 617 |
| | 2007 | | | | Т | | 2007 | | | | 006- | | | | | 0040 | |
| | 2005 | | | | Ā | | 2005 | | | | 005- | | | | | 0050 | |
| | 2005 | | | | A | | 2005 | | | | 005- | | | | | 0050 | |
| | 2005 | | | | A | | 2006 | | | | 005- | | 064 | | | 0051 | |
| PRIORIT | | | | | 21 | | 2000 | | | | 002- | | | | | 0020 | |
| | | | | • • | | | | | | | 003- | | | | | 0030 | |
| | | | | | | | | | | | 003- | | | | | 0030 | |
| | | | | | | | | | | | 003- | | | | | 0030 | |
| | | | | | | | | | | | 004- | | | | - | 0040 | |
| | | | | | | | | | | | 004- | | | 1 | | 0040 | |
| | | | | | | | | | | | | | / | | | | |

OTHER SOURCE(S): MARPAT 140:199635

GI

Lincomycin thio glycoside derivs. I, wherein R1 is alkyl; R2 and R3 are AB independently H, alkyl, hydroxy, fluoro, or cyanoalkyl or one of R2 and R3 is = NOR7 and the other is absent, or one of R2 and R3 is = CH2 and the other is absent, with the proviso that both R2 and R3 are not H; when one of R2 and R3 is fluoro, the other is not hydrogen or hydroxy; and when one of R2 and R3 is hydroxy, the other is not fluoro, hydrogen, or hydroxy; R6 is selected from the group consisting of H, alkyl, hydroxyalkyl, -C(O)O-alkylen-cycloalkyl, -C(0)0-alkylene-substituted cycloalkyl, -C(0)0-alkyl, -C(0)0-substituted alkyl, -C(0)0-aryl, -C(0)0-substituted aryl, -C(0)0-heteroaryl, -C(0)0-substituted heteroaryl, -[C(0)0]p-alkyleneheterocycle, -[C(0)0]p-alkylene-substituted heterocycle, wherein p = 0-1; R7 is H or alkyl; R9 is hydrogen, alkyl, alkoxyalkoxy, cycloalkyl, alkoxyalkoxy, substituted oxygen, substituted nitrogen, halogen, Ph, substituted Ph, -(CH2)m-OH, -(CH2)m-NR4R5, -alkylene-Ra where Ra is monofluorophenyl and monochlorophenyl, and branched chain isomers thereof wherein m is an integer of from 1 to 8 inclusive and R4 and R5 are H or alkyl; n is 1 or 2; are disclosed. These lincomycin derivs. exhibit antibacterial activity. As the compds. of the subject invention exhibit potent activities against bacteria, including gram pos. organisms, they are useful antimicrobial agents. Methods of synthesis and of use of the compds. are also disclosed. Prodrugs, tautomers or pharmaceutically acceptable salts thereof; with the proviso that the compound of formula I has a min. inhibition concentration of 32 ug/mL or less against at least one of the organisms selected from the group consisting of Streptococcus pneumoniae, Staphylococcus aureus, Staphylococcus epidermidis, Enterococcus faecalis, Enterococcus faecium, Haemophilus influenzae, Moraxella catarrhalis, Escherichia coli, Bacteroides fragilis, Bacteroides thetaiotaomicron, and Clostridium difficile. Thus, 1-(4-n-propyl-N-methylpyrrolidin-2-yl)-N-[1-[3,4,5-trihydroxy-6-(methylthio)tetrahydropyran-2-v11-2-methylprop-1-v1]acetamide was prepared and tested in mice as antibacterial agent.

L5 ANSWER 30 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2003:991507 CAPLUS Full-text

DOCUMENT NUMBER: 140:42206

TITLE: Preparation of piperazinylacylpiperidines as

inhibitors of NGF binding (nerve growth factor) to p75NTR (p75 neurotrophic) receptor for treating p75NTR

related diseases

INVENTOR(S): Bono, Francoise; Bosch, Michaeel; Dos Santos, Victor; Herbert, Jean Marc; Nisato, Dino; Tonnerre, Bernard;

Wagnon, Jean

PATENT ASSIGNEE(S): Sanofi-Synthelabo, Fr.

SOURCE: PCT Int. Appl., 56 pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| | TENT 1 | | | | | | DATE | | | | LICAT | | | | | | |
|----------|--------|------|------|-----|-----|-----|------|-------|-----|----|--------|------|------|-----|-----|------|-----|
| | | | | | | | | | | | 2003- | | | | | | |
| | W: | ΑE, | AG, | AL, | AM, | AT, | AU, | AZ, | BA, | BE | 3, BG, | BR, | BY, | BZ, | CA, | CH, | CN, |
| | | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | E(| , EE, | ES, | FI, | GB, | GD, | GE, | GH, |
| | | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE | E, KG, | KP, | KR, | KZ, | LC, | LK, | LR, |
| | | LS, | LT, | LU, | LV, | MA, | MD, | MG, | MK, | M | I, MW, | MX, | MZ, | NI, | NO, | NZ, | OM, |
| | | PH, | PL, | PT, | RO, | RU, | SC, | SD, | SE, | SC | s, SK, | SL, | TJ, | TM, | TN, | TR, | TT, |
| | | TZ, | UA, | UG, | US, | UZ, | VC, | VN, | YU, | ZZ | A. ZM. | ZW | | | | | |
| | RW: | GH. | GM. | KE. | LS. | MW. | MZ. | SD. | SL. | SZ | z, TZ, | UG, | ZM. | ZW. | AM. | AZ, | BY, |
| | | KG, | KZ, | MD, | RU, | TJ, | TM, | AT, | BE, | BO | CH, | CY, | CZ, | DE, | DK, | EE, | ES, |
| | | FI, | FR, | GB, | GR, | HU, | IE, | IT, | LU, | MO | , NL, | PT, | RO, | SE, | SI, | SK, | TR, |
| | | BF, | BJ, | CF, | CG, | CI, | CM, | GA, | GN, | GÇ | 2, GW, | ML, | MR, | NE, | SN, | TD, | TG |
| AU | 20032 | 2556 | 45 | | A1 | | 2003 | 1222 | | AU | 2003- | 2556 | 45 | | 2 | 0030 | 605 |
| | | | | | | | | | | | 2003- | | | | | | |
| EP | 15138 | 336 | | | В1 | | 2006 | 0503 | | | | | | | | | |
| | R: | AT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | GE | R, IT, | LI, | LU, | NL, | SE, | MC, | PT, |
| | | IE, | SI, | LT, | LV, | FI, | RO, | MK, | CY, | AI | , TR, | BG, | CZ, | EE, | HU, | SK | |
| CN | 16752 | 203 | | | A | | 2005 | 0928 | | CN | 2003- | 8188 | 08 | | 2 | 0030 | 605 |
| JP | 20055 | 5330 | 51 | | T | | 2005 | 1104 | | JP | 2003- | 5112 | 96 | | 2 | 0030 | 605 |
| AT | 32512 | 22 | | | T | | 2006 | 0615 | | ΑT | 2003- | 7571 | 09 | | 2 | 0030 | 605 |
| AT | 33649 | 91 | | | T | | | | | | 2003- | | | | | | |
| PT | 15138 | 336 | | | T | | 2006 | 0929 | | PT | 2003- | 7571 | 09 | | 2 | 0030 | 605 |
| ES | 22640 | 001 | | | Т3 | | 2006 | 1216 | | ES | 2003- | 7571 | 09 | | 2 | 0030 | 605 |
| ES | 22716 | 537 | | | Т3 | | 2007 | 0416 | | ES | 2003- | 7571 | 08 | | 2 | 0030 | 605 |
| TW | 2836 | 71 | | | В | | 2007 | 0711 | | TW | 2003- | 9211 | 5416 | | 2 | 0030 | 606 |
| ZA | 20040 | 0098 | 23 | | A | | | | | | 2004- | | | | | | |
| US | 20060 | 0167 | 007 | | A1 | | 2006 | 0727 | | US | 2004- | 5168 | 08 | | 2 | 0041 | 203 |
| US | 72946 | 528 | | | B2 | | 2007 | 1113 | | | | | | | | | |
| PRIORITY | Y APPI | LN. | INFO | . : | | | | | | FR | 2002- | 7001 | | | A 2 | 0020 | 607 |
| | | | | | | | | | | WO | 2003- | FR16 | 86 | | w 2 | 0030 | 605 |
| OTHER SO | OURCE | (S): | | | MAR | PAT | 140: | 42206 | 5 | | | | | | | | |

OTHER SOURCE(S): MARPAT 140:42206 GI

Title compds. I [wherein: Y = (CH2)n; n = 1 or 2; R1 = halo, CF3, alkyl, AB alkoxy, trifluoromethoxy; R2 = H, halo; R3 = H, OR5, CH2OR5, NH2 and derivs., NHCOR6 and derivs., NHCONH2 and derivs., CH2NR7R8, CH2NHCONH2 and derivs., alkoxycarbonyl, CONH2 and derivs.; or R3 forms a double bond between the carbon atom where it is bound to and the neighboring carbon atom of the piperidine cycle; R4 = 1,3-thiazol-2-yl; R5 = H, alkyl, alkylcarbonyl; R6 = alkyl, (CH2)mNH2 and derivs.; m = 1,2, or 3; R7, R8 = independently H, alkyl; R8 = (CH2)qOH, (CH2)qSMe; q = 2 or 3; or R7R8N = aziridine, azetidine, pyrrolidine, piperidine, morpholine; and their salts, hydrates and solvates] were prepared as inhibitors of the binding of 125I NGF to p75NTR (p75 neurotrophic) receptor and of the apoptosis induced by NGF (nerve growth factor) for treating p75NTR related diseases (no data). For example, I (m.p. = 157-158°) was prepared by reacting 2-chloro-1-[4-hydroxy-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-1- ethanone (preparation given) and 1-(1,3-thiazol-2-yl)piperazine dihydrochloride (preparation given) in the presence of KI/K2CO3/MeCN. I inhibited the binding of 125I NGF to p75NTR receptor with IC50 in the range of 10-11 M to 10-6 M at the biochem. level. I inhibited the pro-apoptic effect induced by NGF, via growing cells expressing preferentially p75NTR, with IC50 in the range of 10-11 M to 10-6 M at the cellular level.

REFERENCE COUNT: THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 31 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2003:991506 CAPLUS Full-text

DOCUMENT NUMBER: 140:27846

TITLE: Preparation of piperazinylacylpiperidines as

inhibitors of NGF binding (nerve growth factor) to p75NTR (p75 neurotrophic) receptor for treating p75NTR

related diseases

INVENTOR(S): Bono, Francoise; Bosch, Michaeel; Dos, Santos Victor; Herbert, Jean Marc: Nisato, Dino: Tonnerre, Bernard:

Wagnon, Jean

Sanofi-Synthelabo, Fr.; Dos Santos, Victor PCT Int. Appl., 81 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT ASSIGNEE(S):

SOURCE:

| PA: | | NT NO. KIND DATE | | | | | | | | APPL | | | | | D | | |
|-----|------|------------------|-----|-----|-----|-----|------|------|-----|------|------|------|-----|-----|-----|------|-----|
| WO | 2003 | | | | A1 | | | | | WO 2 | | FR16 | | | 2 | 0030 | |
| | W: | AE, | AG, | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BR, | BY, | BZ, | CA, | CH, | CN, |
| | | co, | CR, | CU, | CZ, | DE. | DK, | DM, | DZ, | EC. | EE, | ES, | FI. | GB, | GD, | GE, | GH, |
| | | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | KP, | KR, | KZ, | LC, | LK, | LR, |
| | | LS, | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | MZ, | NI, | NO, | NZ, | OM, |
| | | PH, | PL, | PT, | RO, | RU, | SC, | SD, | SE, | SG, | SK, | SL, | TJ, | TM, | TN, | TR, | TT, |
| | | TZ, | UA, | UG, | US, | UZ, | VC, | VN, | YU, | ZA, | ZM, | ZW | | | | | |
| | RW: | GH, | GM, | KE, | LS, | MW, | MZ, | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW, | AM, | AZ, | BY, |
| | | KG, | KZ, | MD, | RU, | TJ, | TM, | AT, | BE, | BG, | CH, | CY, | CZ, | DE, | DK, | EE, | ES, |
| | | FI, | FR, | GB, | GR, | HU, | ΙE, | IT, | LU, | MC, | NL, | PT, | RO, | SE, | SI, | SK, | TR, |
| | | BF, | ВJ, | CF, | CG, | CI, | CM, | GA, | GN, | GQ, | GW, | ML, | MR, | NE, | SN, | TD, | TG |
| CA | 2487 | 840 | | | A1 | | 2003 | 1218 | | CA 2 | 003- | 2487 | 840 | | 2 | 0030 | 605 |
| AU | 2003 | 2556 | 44 | | A1 | | 2003 | 1222 | | AU 2 | 003- | 2556 | 44 | | 2 | 0030 | 605 |
| EP | 1513 | 835 | | | A1 | | 2005 | 0316 | | EP 2 | 003- | 7571 | 8 0 | | 2 | 0030 | 605 |
| EP | 1513 | 835 | | | B1 | | 2006 | 0816 | | | | | | | | | |
| | R: | AT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | GR, | IT, | LI, | LU, | NL, | SE, | MC, | PT, |
| | | IE, | SI, | LT, | LV, | FI, | RO, | MK, | CY, | AL, | TR, | BG, | CZ, | EE, | HU, | SK | |

| BR 2003011828 | A | 20050329 | BR | 2003-11828 | | 20030605 |
|------------------------|--------|-----------|----|---------------|---|----------|
| CN 1675203 | A | 20050928 | CN | 2003-818808 | | 20030605 |
| JP 2005534661 | T | 20051117 | JP | 2004-511295 | | 20030605 |
| AT 325122 | T | 20060615 | AT | 2003-757109 | | 20030605 |
| NZ 537044 | A | 20060831 | NZ | 2003-537044 | | 20030605 |
| AT 336491 | T | 20060915 | AT | 2003-757108 | | 20030605 |
| PT 1513836 | T | 20060929 | PT | 2003-757109 | | 20030605 |
| ES 2264001 | T3 | 20061216 | ES | 2003-757109 | | 20030605 |
| ES 2271637 | T3 | 20070416 | ES | 2003-757108 | | 20030605 |
| TW 283671 | В | 20070711 | TW | 2003-92115416 | | 20030606 |
| US 20050176722 | A1 | 20050811 | US | 2004-516704 | | 20041202 |
| ZA 2004009823 | A | 20060726 | ZA | 2004-9823 | | 20041203 |
| NO 2004005331 | A | 20050307 | NO | 2004-5331 | | 20041206 |
| IN 2004KN01862 | A | 20060407 | IN | 2004-KN1862 | | 20041206 |
| MX 2004PA12341 | A | 20050930 | MX | 2004-PA12341 | | 20041207 |
| PRIORITY APPLN. INFO.: | | | FR | 2002-7001 | A | 20020607 |
| | | | WO | 2003-FR1685 | W | 20030605 |
| OTHER SOURCE(S): | MARPAT | 140:27846 | | | | |

R1 N_U_Y_N_N_R4

GΙ

AΒ Title compds. I [wherein: Y = (CH2)n; n = 1 or 2; X = (CH2)p; p = 1 or 2; R1 = halo, CF3, alkyl, alkoxy, trifluoromethoxy; R2 = H, halo; R3 = H, OR5, CH2OR5, NH2 and derivs., NHCOR6 and derivs., NHCONH2 and derivs., CH2NR7R8, CH2NHCONH2 and derivs., alkoxycarbonyl, CONH2 and derivs.; or R3 forms a double bond between the carbon atom where it is bound to and the neighboring carbon atom of the piperidine cycle; R4 = (un)substituted pyridinyl, pyrazinyl, pyrimidinyl, pyridazinyl, 3(2H)-pyridazinon-5-yl, 3(2H)-pyridazinon-4-yl; R5 = H, alkyl, alkylcarbonyl; R6 = alkyl, (CH2)mNH2 and derivs.; m = 1,2, or 3; R7, R8 = independently H, alkyl; R8 = (CH2)qOH, (CH2)qSMe; q = 2 or 3; or R7R8N = aziridine, azetidine, pyrrolidine, piperidine, morpholine; and their salts, hydrates and solvates] were prepared as inhibitors of the binding of 125I NGF to p75NTR (p75 neurotrophic) receptor and of the apoptosis induced by NGF (nerve growth factor) for treating p75NTR related diseases (no data). For example, II.HCl was prepared by reacting 1-(2-pyrazinyl)piperazine (preparation given) with 2-chloro-1-[4-[3-(trifluoromethyl)phenyl]-1piperidiny1]-1-ethanone (preparation given) in the presence of KI/K2CO3/MeCN,

followed by acidulation with HCl. I inhibited the binding of $125I\ \text{NGF}$ to p75NTR receptor with IC50 in the range of 10-11 M to 10-6 M at the biochem. level. I inhibited the pro-apoptic effect induced by NGF, via growing cells expressing preferentially p75NTR, with IC50 in the range of 10-11 M to 10-6 M at the cellular level.

REFERENCE COUNT:

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 32 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2003:892748 CAPLUS Full-text

DOCUMENT NUMBER: 139:381377

Preparation of 4-substituted N-acvlpiperidines as TITLE:

melanocortin receptor ligands for controlling weight

INVENTOR(S): Ebetino, Frank Hallock; Liu, Xuewei; Solinsky, Mark

Gregory; Wos, John August PATENT ASSIGNEE(S):

The Procter & Gamble Company, USA PCT Int. Appl., 98 pp.

SOURCE: CODEN: PIXXD2

DOCUMENT TYPE: Patent. LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| | TENT : | | | | | | DATE | | | | LICAT | | | | | ATE | |
|--------|----------------------------------|-------|------|-----|-----|------|------|------|-----|-------|-------------------------|------|-----|-----|------|------|-----|
| | | | | | | | | | | | 2003- | | | | | | |
| | W: | ΑE, | AG, | AL, | AM, | AT, | AU, | AZ, | BA, | BE | BG, | BR, | BY, | BZ, | CA, | CH, | CN, |
| | | co, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC | , EE, | ES, | FI, | GB, | GD, | GE, | GH, |
| | | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE | KG, | KP, | KR, | KZ, | LC, | LK, | LR, |
| | | LS, | LT, | LU, | LV, | MA, | MD, | MG, | MK, | M | I, MW, | MX, | MZ, | NI, | NO, | NZ, | OM, |
| | | PH, | PL, | PT, | RO, | RU, | SC, | SD, | SE, | SC | s, SK, | SL, | TJ, | TM, | TN, | TR, | TT, |
| | | TZ, | UA, | UG, | UZ, | VC, | VN, | YU, | ZA, | Z | 4, ZW | | | | | | |
| | RW: | GH, | GM, | KE, | LS, | MW, | MZ, | SD, | SL, | S | z, TZ, | UG, | ZM, | ZW, | AM, | AZ, | BY, |
| | | KG, | KZ, | MD, | RU, | TJ, | TM, | AT, | BE, | BO | G, CH, | CY, | CZ, | DE, | DK, | EE, | ES, |
| | | FI, | FR, | GB, | GR, | HU, | IE, | IT, | LU, | MO | , NL, | PT, | RO, | SE, | SI, | SK, | TR, |
| | | BF, | BJ, | CF, | CG, | CI, | CM, | GA, | GN, | GÇ | 2, GW, | ML, | MR, | NE, | SN, | TD, | TG |
| US | 2003 | 0236 | 230 | | A1 | | 2003 | 1225 | | US | 2003- | 4107 | 75 | | 2 | 0030 | 409 |
| | 7026 | | | | | | | | | | | | | | | | |
| CA | 2483 | 787 | | | A1 | | 2003 | 1113 | | CA | 2003- | 2483 | 787 | | 2 | 0030 | 416 |
| AU | 2003 | 23 | | A1 | | 2003 | 1117 | | AU | 2003- | 2309 | 23 | | 2 | 0030 | 416 | |
| EP | 1499 | 588 | | | A1 | | 2005 | 0126 | | EP | 2003- | 7240 | 30 | | 2 | 0030 | 416 |
| | R: | ΑT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | GE | R, IT, | LI, | LU, | NL, | SE, | MC, | PT, |
| | | ΙE, | SI, | LT, | LV, | FI, | RO, | MK, | CY, | AI | , TR, | BG, | CZ, | EE, | HU, | SK | |
| BR | 2003 | 0097 | 44 | | A | | 2005 | 0209 | | BR | 2003- | 9744 | | | 2 | 0030 | 416 |
| CN | 1656 | 070 | | | A | | 2005 | 0817 | | CN | 2003- | 8121 | 95 | | 2 | 0030 | 416 |
| JP | 2005 | 5254 | 12 | | T | | 2005 | 0825 | | JΡ | 2004- | 5013 | 73 | | 2 | 0030 | 416 |
| NZ | 5360 | 99 | | | A | | 2006 | 0929 | | NZ | 2003- | 5360 | 99 | | 2 | 0030 | 416 |
| ZA | 2004 | 0085 | 29 | | A | | 2005 | 0707 | | za | 2004- | 8529 | | | 2 | 0041 | 021 |
| MX | 2004 | PA10 | 761 | | A | | 2005 | 0307 | | MX | 2003-
2004-
2004- | PA10 | 761 | | 2 | 0041 | 029 |
| NO | 2004 | 0051. | 36 | | A | | 2005 | 0124 | | NO | 2004- | 5136 | | | - 2 | 0041 | 125 |
| | | | | | | | | | | | | | | | | | |
| | US 20050171158
IN 2005DN03777 | | | | A | | 2007 | 0810 | | | | | | | | | |
| RIORIT | Y APP | LN. | INFO | . : | | | | | | | 2002- | | | | | | |
| | | | | | | | | | | US | 2003- | 4107 | 75 | | A1 2 | 0030 | 409 |
| | | | | | | | | | | WO | 2003- | US11 | 536 | | W 2 | 0030 | 416 |
| | | | | | | | | | | IN | 2004- | DN32 | 88 | | A3 2 | 0041 | 025 |
| THER S | OURCE | (S): | | | MAR | PAT | 139: | 3813 | 77 | | | | | | | | |
| | | | | | | | | | | | | | | | | | |

AB The present invention relates to compds. that comprise a 4-substituted piperidine ring linked to a (un)substituted hydrocarbyl ring (shown as I; variables defined below; e.g. II) that are useful for controlling weight gain (no data). For I, including all enantiomeric and diastereomeric forms and pharmaceutically acceptable salts thereof: R is substituted aryl, W is a pendant unit -L-Q: L is a linking unit, Q is preferably a cyclic hydrocarbyl unit; W1 is preferably a carbocyclic unit and W2 is a heteroatom comprising unit; addnl. details are given in the claims. The compds. of the present invention will interact preferentially (i.e., selectively) to MC-4 and/or MC-3, relative to the other melanocortin receptors (no data). Although the methods of preparation are not claimed, 5 example prepns. of I and many example prepns. of intermediates are included.

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 33 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2003:855758 CAPLUS Full-text

DOCUMENT NUMBER: 139:364829

TITLE: Preparation of heterocyclo inhibitors of potassium

channel function

INVENTOR(S): Llovd, John; Jeon, Yoon T.; Finlav, Heather; Yan, Lin; Beaudoin, Serge; Gross, Michael F.

PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA; Icagen, Inc.

SOURCE:

PCT Int. Appl., 330 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Enalish

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

| PATENT NO. | K: | IND DATE | | APPLICAT | ION NO. | | DATE | |
|--------------|------------|------------|---------|----------|---------|-----|---------|-----|
| | | | | | | | | |
| WO 200308890 | 8 2 | A2 2003 | 1030 | WO 2003- | JS11807 | | 20030 | 416 |
| WO 200308890 | 8 1 | A3 2004 | 0527 | | | | | |
| W: AE, | AG, AL, AI | M, AT, AU, | AZ, BA, | BB, BG, | BR, BY, | BZ, | CA, CH, | CN, |
| CO, | CR, CU, C | Z, DE, DK, | DM, DZ, | EC, EE, | ES, FI, | GB, | GD, GE, | GH, |
| GM, | HR, HU, II | D, IL, IN, | IS, JP, | KE, KG, | KP, KR, | KZ, | LC, LK, | LR, |
| LS, | LT, LU, L | V, MA, MD, | MG, MK, | MN, MW, | MX, MZ, | NI, | NO, NZ, | OM, |
| | | O, RU, SC, | | | | TM, | TN, TR, | TT, |
| TZ, | UA, UG, US | S, UZ, VC, | VN, YU, | ZA, ZM, | ZW | | | |

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG AU 2003-223651 AU 2003223651 A1 20031103 20030416 EP 1501467 A2 20050202 EP 2003-719792 20030416 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK JP 2005529114 Т 20050929 JP 2003-585661 20030416 NO 2004004351 NO 2004-4351 Α 20041013 20041013 P 20020419 PRIORITY APPLN. INFO.: US 2002-374279P WO 2003-US11807 W 20030416 OTHER SOURCE(S): MARPAT 139:364829

The title compds. [I; m, p = 0-3 (provided that the sum of m and p is at least AB 2); Q = NR1, O, S, SO, SO2; R1 = H, C(:W)NR6R7, SO2NR6R7, OCONR6R7, etc.; R2 = heteroaryl, heteroarylalkyl, aryl, etc.; J = a bond, alkylene; R3 = R5, OR5, SO2R5, etc.; R5 = CN, heteroaryl, aryl, etc.; R6, R7 = H, alkyl, OH, etc.; W = (un) substituted NH, N(CO2H), N(CN), N(SO2H), CH(NO2); Rx = H, alkyl, hydroxyalkyl, aryl, etc.], useful as inhibitors of potassium channel function (especially inhibitors of the Kvl subfamily of voltage gated K+ channels, especially inhibitors Kv1.5 which has been linked to the ultra-rapidly activating delayed rectifier K+ current IKur) in the prevention and treatment of arrhythmia and IKur-associated conditions, were prepared E.g., a multistep synthesis of II [starting from bis(2-chloroethyl)amine], was given. Pharmaceutical composition comprising the compound I is claimed.

L5 ANSWER 34 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER:

2003:610426 CAPLUS Full-text

DOCUMENT NUMBER: TITLE:

139:149925

related compounds for inhibiting β-amyloid

peptide release

Preparation of hydroxyalkanoyl aminopyrazoles and Tung, Jay S.; Guinn, Ashley C.; Thorsett, Gene;

Pleiss, Mike A.

PATENT ASSIGNEE(S): Elan Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 62 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

INVENTOR(S):

Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| | | | | |
| WO 2003064396 | A1 | 20030807 | WO 2003-US3143 | 20030131 |

```
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     US 20040006085
                         A1
                               20040108
                                           US 2003-355700
                                                                  20030131
     US 7053220
                         B2
                               20060530
PRIORITY APPLN. INFO.:
                                           US 2002-353214P
                                                               P 20020201
OTHER SOURCE(S):
                        MARPAT 139:149925
     The invention is directed to a class of compds. R3OCR2(Q)CR5R5aCO-X [X is
     heterocyclylamino, arylamino, carbomethoxyalkylamino, etc.; Q is Q1 or alkyl-
     O-Q1, where Q1 is (un)substituted alk(en)(yn)y1, cycloalky1, carbocycly1,
     aryl, heterocyclyl; R2 is H, Me, Et, Pr, or Bu; R3 is H, alkyl,
     (thio)alkanovl, or carbamovl; R5 is any group given for O1 or alkoxy; R5a is H
     or alk(en)yl], including (hydroxyalkanoyl)aminopyrazoles, -aminothiadiazoles,
     -amino acid esters, -amino acid amides, -amino alcs., -amino ketones, and -
     hydantoins. Pharmaceutical formulations containing compds. of the invention
     are useful for inhibiting \beta-amyloid peptide release and/or synthesis,
     inhibiting \gamma-secretase activity, and treating neurol. disorders, including
     Alzheimer's disease, associated with \( \beta\)-amyloid peptide production. The
     preparation of N-aminohydantoins used in the construction of
     hydroxyalkanoylaminohydantoins is given in the examples. Thus, N3-amino-5,5-
     diphenylimidazolidine-2,4-dione was prepared from 5,5-diphenylydantoin and
     hydrazine monohydrate and reacted with Boc-protected L-phenylglycine to
     prepare N3-[(2S)-aminophenylacetamido]-5,5- diphenylimidazolidine-2,4-dione.
                              THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS
REFERENCE COUNT:
                        1
                              RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
L5 ANSWER 35 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:
                        2003:472390 CAPLUS Full-text
                        139:53026
DOCUMENT NUMBER:
TITLE:
                        Preparation of ureidobenzothiazoles as adenosine
                        receptor ligands
                        Flohr, Alexander; Jakob-Roetne, Roland; Norcross,
INVENTOR(S):
                        Roger David; Riemer, Claus
PATENT ASSIGNEE(S):
                        F. Hoffmann-La Roche Ag, Switz.
                        PCT Int. Appl., 42 pp.
SOURCE:
                        CODEN: PIXXD2
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                        English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
     PATENT NO.
                        KIND
                               DATE
                                          APPLICATION NO.
                                                                  DATE
                                           -----
     WO 2003049741
                        A1
                              20030619 WO 2002-EP13761
                                                                  20021205
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA,
             UG, UZ, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
```

KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,

AB

| | | FI, | FR, | GB, | GR, | IE, | IT, | LU, | MC, | NI | , PT | , SE, | SI, | SK, | TR, | BF, | ВJ, |
|----------|-------|------|------|-----|------|-----|------|------|-----|----|------|-------|-----|-----|------|------|-----|
| | | CF, | CG, | CI, | CM, | GA, | GN, | GQ, | GW, | MI | , MR | , NE, | SN, | TD, | TG | | |
| US | 2003 | 0149 | 036 | | A1 | | 2003 | 0807 | | US | 2002 | -3083 | 38 | | 2 | 0021 | 203 |
| US | 6727 | 247 | | | B2 | | 2004 | 0427 | | | | | | | | | |
| CA | 2469 | 596 | | | A1 | | 2003 | 0619 | | CA | 2002 | -2469 | 596 | | 2 | 0021 | 205 |
| AU | 2002 | 3566 | 26 | | A1 | | 2003 | 0623 | | ΑU | 2002 | -3566 | 26 | | 2 | 0021 | 205 |
| | 2002 | | | | B2 | | 2007 | 1129 | | | | | | | | | |
| BR | 2002 | 0148 | 25 | | A | | 2004 | 0914 | | BR | 2002 | -1482 | 5 | | 2 | 0021 | 205 |
| | 1455 | | | | A1 | | 2004 | | | EΡ | 2002 | -8045 | 78 | | 2 | 0021 | 205 |
| EP | 1455 | 792 | | | В1 | | 2007 | 0418 | | | | | | | | | |
| | R: | | | | | | | | | | | , LI, | | | | MC, | PT, |
| | | ΙE, | SI, | LT, | LV, | | | | | | | , BG, | | | | | |
| | 1602 | | | | A | | | | | | | -8246 | | | | | |
| JP | 2005 | 5160 | 06 | | T | | 2005 | | | | | -5507 | | | | 0021 | |
| | 3597 | | | | | | 2007 | 0515 | | AΤ | 2002 | -8045 | 78 | | 2 | 0021 | 205 |
| ES | 2283 | | | | | | 2007 | 1101 | | ES | 2002 | -8045 | 78 | | 2 | 0021 | 205 |
| RU | 2311 | 905 | | | C2 | | 2007 | 1210 | | RU | 2004 | -1211 | 66 | | 2 | 0021 | 205 |
| | 2004 | | | | A1 | | 2004 | | | US | 2003 | -6917 | 70 | | 2 | 0031 | 023 |
| | 7019 | | | | B2 | | 2006 | | | | | | | | | | |
| MX | 2004 | PA05 | 444 | | A | | 2004 | 1011 | | | | -PA54 | | | | 0040 | |
| PRIORITY | Y APP | LN. | INFO | . : | | | | | | | | -1292 | | | | 0011 | |
| | | | | | | | | | | US | 2002 | -3083 | 38 | | A3 2 | 0021 | 203 |
| | | | | | | | | | | WO | 2002 | -EP13 | 761 | | W 2 | 0021 | 205 |
| OTHER SO | DURCE | (S): | | | MARI | PAT | 139: | 5302 | 6 | | | | | | | | |

$$= \prod_{N=1}^{R} \prod_{N=1}^{N} \prod$$

GI

AB Title compds. [I; R = alkoxy, halo; R1, R2 = H, alkyl, cycloalkyl, tetrahydropyran-4-yl; R1R2N = (substituted) 2-oxa-5- azabicyclo[2.2.1]heptyl, 3-endo-hydroxy-8-azabicyclo[3,2,1]octyl, 2-azabicyclo[2,2,2]octyl, 1-oxo-2,8diazaspiro[4.5]decyl, 3-azaspiro[5.5]undecyl, 8-azaspiro[4.5]decyl, 1-oxa-8azaspiro[4.5]decyl, 1,8,8-trimethyl-3-azabicyclo[3.2.1]octyl, 1,4-oxazepanyl, 2-oxa-5-azabicyclo[2.2.2]octyl, 8-oxa-3-azabicyclo[3.2.1]octyl, 1,4diazabicyclo[3.2.1]octyl, 2-azabicyclo[2.2.1]heptyl, 3-azabicyclo[3.2.1]octyl, piperazinyl, piperidin-1-yl; X = O, CH2; n = 0-4], were prepared Thus, 4methoxy-7-morpholin-4-ylbenzothiazol-2-ylamine in CH2Cl2 was treated with pyridine and Ph chloroformate and the resulting solution stirred for 45 min at ambient temperature; (1S,4S)-2-oxa-5- azabicyclo[2.2.1]heptane was added and the mixture stirred at ambient temperature for 15 min and at 40° for 2.5 h. to give (1S,4S)-2-oxa-5- azabicyclo[2.2.1]heptane-5-carboxylic acid (4-methoxy-7morpholin-4- ylbenzothiazol-2-yl)amide. This bound to human A2a receptors with pKi = 8.5.

REFERENCE COUNT:

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ACCESSION NUMBER: 2003:257877 CAPLUS Full-text

DOCUMENT NUMBER: 133:255224

TITLE: Preparation of oxazolidinones

INVENTOR(S): Kawanami, Hajime; Ikushima, Yutaka; Torii, Kazuo
PATENT ASSIGNEE(S): National Institute of Advanced Industrial Science and

Technology, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

DOCUMENT TYPE:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|-------|---------------|----------------------|----------|
| | | | | |
| JP 2003096058 | A | 20030403 | JP 2001-291202 | 20010925 |
| JP 3873115 | B2 | 20070124 | | |
| PRIORITY APPLN. INFO.: | | | JP 2001-291202 | 20010925 |
| OTHER SOURCE(S): | CASRE | ACT 138:25522 | 4; MARPAT 138:255224 | |
| | | | | |

AB The compds. I [R1-R7 = H, (un)substituted aryl, C1-15 alkyl, alkenyl, alkynyl, cycloalkyl, etc.; n = 0-5] are prepared by reaction of cyclic amines II (R1-R7, n = same as I) with CO2 in the presence of halogen catalysts. 2-Phenylaziridine was treated with CO2 in the presence of I in EtOH at 40° under 100 kg/cm2 for 15 h to give 91.08 2-phenyloxazolidinone

L5 ANSWER 37 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2003:76612 CAPLUS Full-text

DOCUMENT NUMBER: 138:137588

TITLE: Preparation of bridged piperidine amino acid

derivatives as melanocortin receptor agonists
INVENTOR(S): Ye, Zhixiong; Barakat, Khaled J.; Guo, Liangqin;

Nargund, Ravi P.; Sebhat, Iyassu K.

PATENT ASSIGNEE(S): Merck & Co., Inc., USA SOURCE: PCT Int. Appl., 105 pp.

CODEN: PIXXD2 Patent

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| | ATENT | | | | | | | | | | | | | | ATE | | |
|--------|--------|-------|-----|-----|------|-----|------|------|-----|------|------|------|-----|-----|-----|------|-----|
| - | | | | | | - | | | | | | | | | | | |
| W | 0 2003 | 30079 | 49 | | A1 | | 2003 | 0130 | | WO 2 | 002- | US22 | 258 | | 2 | 0020 | 712 |
| | W: | ΑE, | AG, | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BR, | BY, | BZ, | CA, | CH, | CN, |
| | | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | ES, | FI, | GB, | GD, | GE, | GH, |
| | | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | KR, | KZ, | LC, | LK, | LR, | LS, |
| | | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | MZ, | NO, | NZ, | OM, | PH, | PL, |
| | | PT, | RO, | RU, | SD, | SE, | SG, | SI, | SK, | SL, | TJ, | TM, | TN, | TR, | TT, | TZ, | UA, |
| | | UG, | US, | UZ, | VN, | YU, | ZA, | ZM, | ZW | | | | | | | | |
| | RW: | GH, | GM, | KE, | LS, | MW. | MZ, | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW, | AT, | BE, | BG, |
| | | | | | | | EE, | | | | | | | | | | |
| | | PT. | SE, | SK, | TR, | BF, | BJ, | CF, | CG, | CI, | CM, | GA, | GN, | GO, | GW, | ML, | MR. |
| | | NE. | SN, | TD. | TG | | | | | | | | | | | | |
| C | A 245 | 3609 | | | A1 | | 2003 | 0130 | | CA 2 | 002- | 2453 | 609 | | 2 | 0020 | 712 |
| | U 200 | | | | | | | | | | | | | | | | |
| A | U 200 | 23204 | 94 | | B2 | | 2006 | 0629 | | | | | | | | | |
| Е | P 141 | 1940 | | | A1 | | 2004 | 0428 | | EP 2 | 002- | 7500 | 14 | | 2 | 0020 | 712 |
| | | AT, | | | | | | | | | | | | | | | |
| | | | | | | | RO, | | | | | | | | | | |
| J | P 200 | 15382 | 81 | | T | | 2004 | 1224 | | JP 2 | 003- | 5135 | 56 | | 2 | 0020 | 712 |
| | S 200 | | | | | | | | | | | | | | | | |
| | S 711 | | | | | | | | | | | | | | | | |
| PRIORI | | | | | | | | | | US 2 | 001- | 3063 | 59P | 1 | P 2 | 0010 | 718 |
| | | | | | | | | | | | 002- | | | | | | |
| OTHER | SOURCE | E(S): | | | MARI | PAT | 138: | 1375 | | | | | | | | | |
| GI | | | | | | | | | | | | | | | | | |

$$\begin{array}{c|c} z & & \\ & & \\ & & \\ \end{array}$$

Novel bridged piperidine derivs. I [R1 = H or (un)substituted alkvl, (CHR7)0-AB 2cycloalkyl, (CHR7)1-20(CHR7)aryl, or (CHR7)0-2-(hetero)aryl, where R7 = H or (un) substituted alkyl, (CH2) 0-2phenyl, -naphthyl, -heteroalkyl, or cycloalkyl; or two R7 groups may form a ring; R2 = H, alkyl, (CH2)0-2cycloalkyl or -aryl; X = (CR3R4)1-2, where R3, R4 = H, alkyl, (CH2)0-2cycloalkyl or -aryl, OH, halo, or amino; R5 = H, alkyl, (CH2)0-2-(hetero)aryl, -cycloalkyl, or -heterocyclyl, acyl, CH2C.tplbond.CH, CO2R7, CH2CHF2, CONR72, SO2R7, etc.; Y = H, (un)substituted alk(en)vl, (CH2)0-2cycloalkyl, -Ph,-naphthyl, -heteroaryl, or -heterocyclyl; Z = alkyl or (CH2)0-2 attached to certain rings or functional groups were prepared as agonists of human melanocortin receptor(s), in particular, the human melanocortin-4 receptor (MC-4R). They are therefore useful for the treatment, control, or prevention of diseases and disorders responsive to the activation of MC-4R, such as obesity, diabetes, and sexual dysfunction. Thus, I (R1 = p-FC6H4CH2, R2 = R5 = H, X = CH2, Y = cyclohexyl, Z = Me3CNHCO) was prepared as

diastereomers via a coupling reaction. Compds. of the invention were found to

bind to MC-4R (IC50 < 2 μM , EC50 < 1 μM).

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 38 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2002:813930 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 137:325334

TITLE: Preparation of anyl and biaryl piperidines as MCH

antagonists

INVENTOR(S): Hobbs, Douglas W.; Guo, Tao; Hunter, Rachael C.; Gu,

Huizhong; Babu, Suresh D.; Shao, Yuefei

PATENT ASSIGNEE(S): Pharmacopeia, Inc., USA

SOURCE: PCT Int. Appl., 113 pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

GI

| PA: | PATENT NO. | | | | | | DATE | | | APPL | ICAT | ION | NO. | | D | ATE | |
|----------|------------|-----|------|-----|------|------|------|------|------|------|------|------|-----|------|-----|------|-----|
| WO | 2002 | | | | | | 2002 | 1024 | | WO 2 | 002- | JS11 | 296 | | 2 | 0020 | 410 |
| | W: | ΑE, | AG, | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BR, | BY, | BZ, | CA, | CH, | CN, |
| | | CO, | CR, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | ES, | FI, | GB, | GD, | GE, | HR, | HU, |
| | | ID, | IL, | IN, | IS, | JP, | KG, | KR, | ΚZ, | LC, | LK, | LR, | LT, | LU, | LV, | MA, | MD, |
| | | MG, | MK, | MN, | MX, | MZ, | NO, | ΝZ, | PH, | PL, | PT, | RO, | RU, | SE, | SG, | SI, | SK, |
| | | SL, | ΤJ, | TM, | TN, | TR, | TT, | TZ, | UA, | UZ, | VN, | YU, | ZA, | ZM | | | |
| | RW: | GH, | GM, | KE, | LS, | MW, | MZ, | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW, | ΑT, | BE, | CH, |
| | | CY, | DE, | DK, | ES, | FI, | FR, | GB, | GR, | ΙE, | ΙT, | LU, | MC, | NL, | PT, | SE, | TR, |
| | | | | | | | CM, | | | | | | | | | | |
| | 2443 | | | | | | | | | | | | | | | | |
| | 2002 | | | | | | | | | | | | | | | | |
| | 2003 | | | | | | | | | US 2 | 002- | 1200 | 80 | | 2 | 0020 | 410 |
| | 6887 | | | | | | | | | | | | | | | | |
| EP | 1377 | 293 | | | A1 | | 2004 | 0107 | | EP 2 | 002- | 7313 | 18 | | 2 | 0020 | 410 |
| | R: | | | | | | ES, | | | | | LI, | LU, | NL, | SE, | MC, | PT, |
| | | ΙE, | SI, | LT, | LV, | FI, | RO, | MK, | CY, | ΑL, | TR | | | | | | |
| | 2004 | | | | | | | | | | | | | | | 0020 | 410 |
| MX | 2003 | | A | | 2004 | 0212 | | MX 2 | 003- | PA93 | 53 | | 2 | 0031 | 010 | | |
| PRIORIT: | Y APP | LN. | INFO | . : | | | | | | | 001- | | | | | 0010 | 412 |
| | | | | | | | | | | WO 2 | 002- | JS11 | 296 | 1 | 7 2 | 0020 | 410 |
| OTHER SO | DURCE | | MARI | PAT | 137: | 3253 | 34 | | | | | | | | | | |

AB The title compds. I[; Arl = (un)substituted Ph, pyridyl, pyrimidyl, etc.; Z = R4, COR4, SO2R4, etc.; R2 = H, alkyl, alkyl substituted with cycloalkyl; R3 = H, alkyl, cycloalkyl, etc.; R4 = Ph, phenylalkyl], useful for treatment, prevention or amelioration of one or more of diseases associated with the MCH receptor, were prepared E.g., a 7-atep synthesis of II, starting from 3,4-difluorophenyl isocyanate, which showed Ki of 11-100 nM against MCH, was given. This invention provides also pharmaceutical compns. containing one or more of the compds. I for treatment of eating disorders.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 39 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2002:793427 CAPLUS Full-text

DOCUMENT NUMBER: 137:310932

TITLE: Preparation of N-substituted nonaryl heterocyclyl amides as NMDA/NR2B antagonists for relieving pain

INVENTOR(S): Liverton, Nigel J.; Butcher, John W.; McIntyre, Charles J.; Claiborne, Christopher F.; Claremon, David A.; McCauley, James A.; Romano, Joseph J.; Thompson,

Wayne; Munson, Peter M.
PATENT ASSIGNEE(S): Merck & Co., Inc., USA

SOURCE: PCT Int. Appl., 270 pp.

DOCUMENT TYPE: Patent

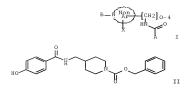
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| | PATENT NO. | | | | | D | DATE | | | | ICAT | | | | | ATE | |
|-----|---------------------|------|-----|-----|-----|-----|------|------|-----|------|------|------|-----|-----|-----|------|-----|
| | 2002 | | | | 7.1 | - | | | | | | | | | | | |
| WO | | | | | | | AU, | | | | | | | | | | |
| | | | | | | | DK, | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | IN, | | | | | | | | | | |
| | | | | | | | MG, | | | | | | | | | | |
| | | | | | | | SG, | | | SL, | TJ, | TM, | TN, | TR, | TT, | TZ, | UA, |
| | | | | | | | ZA, | | | | | | | | | | |
| | RW: | | | | | | ΜZ, | | | | | | | | | | |
| | | CY, | DE, | DK, | ES, | FI, | FR, | GB, | GR, | ΙE, | IT, | LU, | MC, | NL, | PT, | SE, | TR, |
| | | BF, | ВJ, | CF, | CG, | CI, | CM, | GA, | GN, | GQ, | GW, | ML, | MR, | NE, | SN, | TD, | TG |
| CA | 2443 | 108 | | | A1 | | 2002 | 1017 | | CA 2 | 002- | 2443 | 108 | | 2 | 0020 | 402 |
| AU | 2002 | 3383 | 34 | | A1 | | 2002 | 1021 | | AU 2 | 002- | 3383 | 34 | | 2 | 0020 | 402 |
| US | 2003 | 0119 | 811 | | A1 | | 2003 | 0626 | | US 2 | 002- | 1146 | 85 | | 2 | 0020 | 402 |
| US | 7259 | 157 | | | B2 | | 2007 | 0821 | | | | | | | | | |
| EP | 1390 | 034 | | | A1 | | 2004 | 0225 | | EP 2 | 002- | 7638 | 96 | | 2 | 0020 | 402 |
| | | | | | | | ES, | | | | | | | | | | |
| | | | | | | | RO, | | | | | | , | | | , | , |
| .TP | 2005 | | | | | | | | | | | 5789 | 67 | | 2 | 0020 | 402 |
| | JP 2005511478 | | | | | | | | | | 001- | | | | | 0010 | |
| | TONIII MELLIN. INIO | | | | | | | | | | 002- | | | | | 0020 | |

OTHER SOURCE(S): MARPAT 137:310932

GT



The title compds. [I; NonAr = nonarom, 5-7 membered containing heteroatoms; A AB = (un)substituted Ph, pyrrolyl, imidazolyl, etc.; B = aryl(CH2)0-3(CH2)0-2CO, heteroarv1(CH2)1-30(CH2)0-2CO, etc.; X = H, OH, F, etc.1 which are effective as NMDA NR2B antagonists useful for relieving pain, were prepared E.g., a 2step synthesis of II, starting with 4-aminomethylpiperidine, was given. The compds. I exhibit IC50's of less than 50 µM in the FLIPR and binding assays, and thus they have been found to exhibit biol. activity as NMDA NR2B antagonists.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 40 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2002:675992 CAPLUS Full-text

DOCUMENT NUMBER: 137:216873

TITLE: Acvlated piperidine derivatives, specifically

1-(pyrrolidinylcarbonyl)piperidines,

1-(piperidinylcarbonyl)piperidines, and analogs, as

melanocortin-4 receptor agonists, and their

pharmaceutical compositions and therapeutic uses

INVENTOR(S): Goulet, Mark T.; Nargund, Ravi P.; Sebhat, Ivassu K.; Ujjainwalla, Feroze; Walsh, Thomas F.; Warner, Daniel;

Young, Jonathan R.; Bakshi, Raman K.

Merck & Co., Inc., USA; Ye, Zhixiong

PCT Int. Appl., 138 pp.

SOURCE:

CODEN: PIXXD2 DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2 PATENT INFORMATION:

PATENT ASSIGNEE(S):

| PATENT NO. KIND | | | | | | DATE | | | APPL | ICAT | ION I | NO. | | D | ATE | |
|-----------------|-------|-----|-----|-----|-----|------|------|-----|------|------|-------|-----|-----|-----|------|-----|
| | | | | | _ | | | | | | | | | | | |
| WO 200 | 20683 | 87 | | A2 | | 2002 | 0906 | | WO 2 | 002- | JS56: | 23 | | 2 | 0020 | 225 |
| WO 200 | 20683 | 87 | | A3 | | 2003 | 0220 | | | | | | | | | |
| W: | ΑE, | AG, | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BR, | BY, | ΒZ, | CA, | CH, | CN, |
| | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | ES, | FI, | GB, | GD, | GE, | GH, |
| | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KΕ, | KG, | KR, | ΚZ, | LC, | LK, | LR, | LS, |
| | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | MZ, | NO, | NZ, | OM, | PH, | PL, |
| | PT, | RO, | RU, | SD, | SE, | SG, | SI, | SK, | SL, | TJ, | TM, | TN, | TR, | TT, | TZ, | UA, |
| | UG, | US, | UZ, | VN, | YU, | ZA, | ZM, | ZW | | | | | | | | |
| RW | : GH, | GM, | KE, | LS, | MW, | MZ, | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW, | AM, | AZ, | BY, |
| | KG, | KZ, | MD, | RU, | TJ, | TM, | AT, | BE, | CH, | CY, | DE, | DK, | ES, | FI, | FR, | GB, |
| | GR. | IE. | IT. | LU. | MC. | NL. | PT. | SE. | TR. | BF. | BJ. | CF. | CG. | CI. | CM. | GA. |

| | GI | N, GÇ | , GW, | ML, | MR, | NE, | SN, | TD, | TG | | | | | | | |
|----------|----------|-------|-------|-------|-----|------|------|-----|------|-------|-------|-----|-----|----|-------|------|
| CA | 243914 | 9 | | A1 | | 2002 | 0906 | (| CA 2 | 2002- | 2439: | 149 | | | 20020 | 0225 |
| AU | 200225 | 5597 | | A1 | | 2002 | 0912 | Z | AU 2 | 2002- | 25559 | 97 | | | 20020 | 0225 |
| AU | 200225 | 5597 | | B2 | | 2006 | 0302 | | | | | | | | | |
| EP | 137265 | 3 | | A2 | | 2004 | 0102 | E | SP 2 | 2002- | 72500 | 01 | | | 20020 | 0225 |
| EP | 137265 | 3 | | B1 | | 2006 | 1004 | | | | | | | | | |
| | R: A' | T, BE | , CH, | DE, | DK, | ES, | FR, | GB, | GR, | IT, | LI, | LU, | NL, | SE | MC, | , PT |
| | II | E, SI | , LT, | LV, | FΙ, | RO, | MK, | CY, | AL, | TR | | | | | | |
| JP | 200452 | 7498 | | T | | 2004 | 0909 | | JP 2 | 2002- | 56790 | 01 | | | 20020 |)225 |
| AT | 341327 | | | T | | 2006 | 1015 | Z | AT 2 | 2002- | 72500 | 01 | | | 20020 | 0225 |
| ES | 227270 | 3 | | Т3 | | | 0501 | | | | | | | | | |
| ZA | 200300 | 6160 | | A | | 2004 | 0721 | 2 | ZA 2 | 2003- | 6160 | | | | 20030 | 8080 |
| US | 200400 | 97546 | | A1 | | 2004 | 0520 | Ţ | JS 2 | 2003- | 4685 | 15 | | | 20030 | 0819 |
| US | 701523 | 5 | | B2 | | 2006 | 0321 | | | | | | | | | |
| US | 200600 | 35935 | | A1 | | 2006 | 0216 | Į | JS 2 | 2005- | 23972 | 21 | | | 20050 | 0890 |
| JP | 200815 | 0394 | | A | | 2008 | 0703 | į, | JP 2 | -8009 | 2602 | 8 | | | 20080 | 0206 |
| PRIORIT: | Y APPLN | . INF | 'O.: | | | | | Ţ | JS 2 | 2001- | 2722 | 58P | | P | 20010 | 0228 |
| | | | | | | | | Ţ | JS 2 | 2001- | 3005 | 72P | | P | 20010 | 0622 |
| | | | | | | | | Ţ | JS 2 | 2001- | 3001 | 18P | | P | 20010 | 0622 |
| | | | | | | | | | JP 2 | 2002- | 56790 | 02 | | A3 | 20020 | 0225 |
| | | | | | | | | Ţ | 10 2 | 2002- | US562 | 23 | | W | 20020 | 225 |
| | | | | | | | | Ţ | JS 2 | 2003- | 4685 | 15 | | А3 | 20030 | 0819 |
| OTHER SO | OURCE (S |): | | MARP. | ΑT | 137: | 2168 | 73 | | | | | | | | |

- * STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT *
- AB Certain novel 4-substituted N-acylated piperidine derivs., specifically I, are agonists of the human melanocortin receptor(s) and, in particular, are selective agonists of the human melanocortin-4 receptor (MC-4R) (wherein: p = 1 or 2; q = 0, 1, or 2; n = 0, 1, or 2; R1 = H, amidino, alkyliminoyl, (un) substituted alkyl, (CH2) n-G1 [G1 = (un) substituted cycloalkyl, Ph, naphthyl, or heteroaryl]; R2 = (un)substituted Ph, naphthyl, or heteroaryl; X = alkyl, (CH2)n-G2 [G2 = (un)substituted cycloalkyl, Ph, naphthyl, heteroaryl, heterocyclyl, cyano, CONH2, CO2H, OH, NH2, and various derivs.]; Y = (un) substituted alkyl, alkenyl, (CH2)n-G3 [G3 = (un) substituted cycloalkyl, Ph, naphthyl, heteroaryl, or heterocyclyl]; including pharmaceutically acceptable salts]. They are therefore useful for the treatment, control, or prevention of diseases and disorders responsive to the activation of MC-4R, such as obesity, diabetes, sexual dysfunction, including erectile dysfunction and female sexual dysfunction. Approx. 200 invention compds. I and approx. 80 intermediates were prepared For instance, amidation of (±)-trans-1-(tertbutoxycarbonyl)-3-(4- fluorophenyl)piperidine-4-carboxylic acid with 4cyclohexyl-4-[(4,4- dimethyl-2-oxo-1,3-oxazolidin-3-yl)methyl]piperidine HCl, followed by N-deprotection with removal of BOC using HCl, and reductive Nmethylation using paraformaldehyde and NaBH3CN, gave title compound (±)-trans-II, isolated as the trifluoroacetate salt. Representative compds. I bound to cloned human MC-4R in vitro with IC50 values generally below 2 µM, and also acted as agonists toward cloned human MCR in a functional assay with EC50 values less than 1 uM.

L5 ANSWER 41 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2002:675785 CAPLUS Full-text DOCUMENT NUMBER: 137:216872

TITLE: Acvelated objections derivative.

Acylated piperidine derivatives, specifically 1-[(aminocycloalkyl)carbonyl]piperidines, as

melanocortin-4 receptor agonists, and their pharmaceutical compositions and therapeutic uses Goulet, Mark T.; Nargund, Ravi P.; Ujjainwalla,

Feroze; Walsh, Thomas F.; Warner, Daniel PATENT ASSIGNEE(S): Merck & Co., Inc., USA

SOURCE: PCT Int. Appl., 106 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

INVENTOR(S):

GI

| | PATENT NO.

WO 2002067869 | | | | | | | | | | | | | | | | |
|----------|---------------------------------|------|------|-----|-----|-----|------|------|-----|----|-------|------|-----|-----|------|-------|-----|
| | | | | | | | | | | | | | | | | | |
| WO | 2002 | 0678 | 69 | | A3 | | 2003 | 0227 | | | | | | | | | |
| | W: | AE, | AG, | AL, | AM, | AT, | AU, | AZ, | BA, | BE | , BG, | BR, | BY, | BZ, | CA, | CH, | CN, |
| | | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC | , EE, | ES, | FI, | GB, | GD, | GE, | GH, |
| | | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE | , KG, | KR, | KZ, | LC, | LK, | LR, | LS, |
| | | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW | , MX, | MZ, | NO, | NZ, | OM, | PH, | PL, |
| | | PT, | RO, | RU, | SD, | SE, | SG, | SI, | SK, | SI | , TJ, | TM, | TN, | TR, | TT, | TZ, | UA, |
| | | UG, | US, | UZ, | VN, | YU, | ZA, | ZM, | ZW | | | | | | | | |
| | RW: | GH, | GM, | KE, | LS, | MW, | MZ, | SD, | SL, | SZ | , TZ, | UG, | ZM, | ZW, | AT, | BE, | CH, |
| | | CY, | DE, | DK, | ES, | FI, | FR, | GB, | GR, | IE | , IT, | LU, | MC, | NL, | PT, | SE, | TR, |
| | | BF, | ВJ, | CF, | CG, | CI, | CM, | GA, | GN, | GÇ | , GW, | ML, | MR, | NE, | SN, | TD, | TG |
| CA | 2439 | 119 | | | A1 | | 2002 | 0906 | | CA | 2002- | 2439 | 119 | | 2 | 20020 | 225 |
| AU | 2002 | 2503 | 43 | | A1 | | 2002 | 0912 | | AU | 2002- | 2503 | 43 | | 2 | 20020 | 225 |
| AU | 2002 | 2503 | 43 | | B2 | | 2006 | 0525 | | | | | | | | | |
| EP | 1385 | 506 | | | A2 | | 2004 | 0204 | | EP | 2002- | 7192 | 51 | | 2 | 20020 | 225 |
| | R: | AT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | GF | , IT, | LI, | LU, | NL, | SE, | MC, | PT, |
| | | IE, | SI, | LT, | LV, | FI, | RO, | MK, | CY, | AL | , TR | | | | | | |
| JP | 2004 | 5306 | 56 | | T | | 2004 | 1007 | | JP | 2002- | 5672 | 41 | | 2 | 20020 | 225 |
| US | 2004 | 0092 | 501 | | A1 | | 2004 | 0513 | | US | 2003- | 4685 | 17 | | 2 | 20030 | 819 |
| US | 7012 | 084 | | | B2 | | 2006 | 0314 | | | | | | | | | |
| US | 2006 | 0025 | 442 | | A1 | | 2006 | 0202 | | US | 2005- | 2397 | 70 | | 2 | 20050 | 930 |
| PRIORIT | Y APP | LN. | INFO | . : | | | | | | US | 2001- | 2722 | 59P | 1 | P 2 | 20010 | 228 |
| | | | | | | | | | | WO | 2002- | US80 | 02 | 1 | W 2 | 0020 | 225 |
| | | | | | | | | | | US | 2003- | 4685 | 17 | | A3 2 | 0030 | 819 |
| OTHER SO | R SOURCE(S): | | | | | PAT | 137: | 2168 | 72 | | | | | | | | |

AB Certain novel 4-substituted N-acylated piperidine derivs., specifically I, are agonists of the human melanocortin receptor(s) and, in particular, are selective agonists of the human melanocortin-4 receptor (MC-4R) [wherein: p = 1 or 2; q = 0, 1, or 2; n = 0, 1, or 2; Rl, R2 = H, amidino, alkyliminoyl, (un)substituted alkyl, (CH2)n-G1 [G1 = (un)substituted cycloalkyl, Ph, naphthyl, or heteroaryl]; or NRIR2 = 4- to 8-membered mono- or bicyclic ring system optionally containing an addition 0, S, or N-alkyl atom(s); R3 = (un)substituted Ph, naphthyl, hor heteroaryl; X = alkyl, (CH2)n-G2 [G2 = (un)substituted cycloalkyl, Ph, naphthyl, heteroaryl, heteroacylyl, cyano, CONH2, CO2H, OH, NH2, and various derivs.]; Y = H, (un)substituted alkyl, alkenyl, cycloalkyl, (CH2)n-G3 [G3 = (un)substituted cycloalkyl, Ph, naphthyl, heteroaryl, or heterocyclyl]; including pharmaceutically acceptable salts]. They are therefore useful for the treatment, control, or prevention of diseases and disorders responsive to the activation of MC-4R, such as obesity,

^{*} STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

dysfunction. Approx. 40 invention compds. I and approx. 20 intermediates were prepared For instance, the intermediate ester (±)-trans-Me 2-(4-chlorophenyl)-4- oxocyclohexanecarboxylate (preparation given) was saponified and the resulting acid was used to amidate 4-cyclohexyl-4-[(4,4-dimethyl-2-oxo-1,3oxazolidin-3-yl)methyl]piperidine HCl. The obtained keto amide was aminated using dimethylamine, Ti(OPr-iso)4, and NaBH4, to give epimeric invention compds. α - and β -II, isolated sep. as the trifluoroacetate salts. Representative compds. I bound to cloned human MC-4R in vitro with IC50 values generally below 2 μM , and also acted as agonists toward cloned human MCR in a functional assav with EC50 values less than 1 uM.

diabetes, sexual dysfunction, including erectile dysfunction and female sexual

L5 ANSWER 42 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2002:171864 CAPLUS Full-text

DOCUMENT NUMBER:

TITLE: Preparation of dialkoxyaminoquinazolines as alpha-1

adrenergic antagonists

Becker, Cyrus Kephra; Melville, Chris Richard; INVENTOR(S): Pfister, Juerg Roland; Zhang, Xiaoming

PATENT ASSIGNEE(S): F. Hoffmann-La Roche Ag, Switz.

SOURCE: PCT Int. Appl., 60 pp.

PRI

CODEN: PIXXD2 DOCUMENT TYPE: Pat.ent. LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| | | | | | | | | | | | LICAT | | | | | | |
|------|-------|---|---|---|---|--|---------------------------------|---------------------------------|---------------------------------|----------------------|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| WO | | 0183 | 48 | | A2 | | 2002 | 0307 | | | 2001- | | | | | | |
| | W: | AE,
CO,
GM,
LS,
PT,
UZ,
GH, | AG,
CR,
HR,
LT,
RO,
VN,
GM, | AL,
CU,
HU,
LU,
RU,
YU,
KE, | AM,
CZ,
ID,
LV,
SD,
ZA,
LS, | AT,
DE,
IL,
MA,
SE,
ZW
MW, | AU,
DK,
IN,
MD,
SG, | AZ,
DM,
IS,
MG,
SI, | BA,
DZ,
JP,
MK,
SK, | EC
KE
MN
SL | , BG,
, EE,
, KG,
, MW,
, TJ, | ES,
KP,
MX,
TM, | FI,
KR,
MZ,
TR, | GB,
KZ,
NO,
TT, | GD,
LC,
NZ,
TZ, | GE,
LK,
PH,
UA, | GH,
LR,
PL,
UG, |
| | | ВJ, | CF, | CG, | CI, | CM, | GA, | GN, | GQ, | GW | , LU, | MR, | NE, | SN, | TD, | TG | · |
| CA | 2420 | 177 | | | A1 | | 2002 | 0307 | | CA | 2001- | 2420 | 177 | | 2 | 20010 | 823 |
| | | | | | | | | | | | 2001- | | | | | | |
| EP | 1315 | 714 | | | A2 | | 2003 | 0604 | | EP | 2001- | 9742 | 10 | | 2 | 20010 | 823 |
| EP | 1315 | 714 | | | B1 | | 2005 | 1109 | | | | | | | | | |
| | R: | | | | | | | | | | , IT, | | LU, | NL, | SE, | MC, | PT, |
| | | | | | | | | | | | , TR | | | | | | |
| | | | | | | | | | | | 2001- | | | | | | |
| JP | 2004 | 5075 | 27 | | Т | | 2004 | 0311 | | JP | 2002- | 5234 | 66 | | - 2 | 20010 | 823 |
| | 3971 | | | | | | 2007 | 0905 | | | | | | | | | |
| CN | 1545 | 510 | | | A | | | | | | 2001- | | | | | | |
| AT | 3092 | 40 | | | T | | | 1115 | | | 2001- | | | | | 20010 | |
| | 2251 | | | | | | | 0501 | | | 2001- | | | | | | |
| | 2001 | | | | | | | | | | 2001- | | | | | | |
| US | 2002 | 0045 | 614 | | A1 | | | 0418 | | US | 2001- | 9423 | 85 | | 2 | 20010 | 829 |
| | 6559 | | | | | | | 0506 | | | | | | | | | |
| | 2003 | | | | | | | | | | 2003- | | | | | | |
| | 2003 | | | | A | | 2003 | 0604 | | | 2003- | | | | | | |
| DRIT | Y APP | LN. | INFO | .: | | | | | | US | 2000- | 2295 | 03P | | P 2 | 0000 | 831 |
| | | | | | | | | | | | | | | | | | |

MARPAT 136:232312

$$\begin{array}{c} {\mathbb{R}}^{70} \\ {\mathbb{R}}^{80} \end{array} \xrightarrow[NH2]{}^{\mathbb{R}^{1}} \begin{array}{c} {\mathbb{R}^{2}} \\ {(CH_{2})}_{11} \\ {(CH_{2})}_{12} \end{array} \times \mathbb{N} - \mathbb{A} \end{array}$$

$$\underset{\text{MeO}}{\text{MeO}} \underset{\text{NH}2}{\overset{\text{Me}}{\longrightarrow}} \underset{\text{Ph}}{\overset{\text{Me}}{\longrightarrow}} \underset{\text{Ph}}{\overset{\text{H}}{\longrightarrow}}$$

AB Title compds. I [R1 = H, alkyl; R2 = alkyl, (un)substituted heterocyclyl, heteroaryl or aryl; R7 and R8 independently = alkyl; A = H, (CH2)0-1R3, COR3, SO2R3, CO2R3, CONR4R5, SO2NR4R5, C(NR6)R5 or C(NR6)NR4R5; R3 = (un)substituted alkyl, aryl, arylalkyl, heteroaryl, etc.; R4 and R5 independently = H, or R4R5 together form 5-7 membered cycloalkyl or heterocyclyl; R6 = H, alkyl, CN; n = 0-2 and m = 0-3 wherein $m + n \ge 21$ or prodrugs, individual isomers, racemic or non-racemic mixts. of isomers, or pharmaceutically acceptable salts or solvates thereof are prepared and disclosed as alpha-1B adrenergic receptor antagonists. Thus, II was prepared via substitution of 2-chloro-6,7-dimethylquinazolin-4- ylamine with (1-benzyl-4-phenyl-piperidin-4-ylmethyl)-methylamine, followed by N-debenzylation. II possessed a pKi of 7.99 toward alpha-1B, pKi of 6.52 toward alpha-1A, and pKi of 6.60 toward alpha-1D. The invention further relates to pharmaceutical compns. containing I and the use of such compds. in the control and prevention of diseases, such as disorders of the urinary tract, sexual dysfunction, pain, or disorders of the central nervous system.

L5 ANSWER 43 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2002:157581 CAPLUS Full-text

DOCUMENT NUMBER: 136:216648

TITLE: Preparation of substituted piperidines as melanocortin

receptor agonists

INVENTOR(S): Bakshi, Raman K.; Barakat, Khaled J.; Lai, Yingjie; Nargund, Ravi P.; Palucki, Brenda L.; Park, Min K.; Patchett, Arthur A.; Sebhat, Iyassu; Ye, Zhixiong

Merck & Co., Inc., USA

PATENT ASSIGNEE(S): SOURCE: PCT Int. Appl., 128 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| | PATENT NO. | | | | | | | | | | LICAT | | | | | ATE | |
|---------|------------|------|------|-----|-----|-----|------|------|-----|------|-------|------|-----|-----|-----|------|-----|
| | 2002 | | | | | | | | | | | | | | | | |
| | W: | AE, | AG, | AL, | AM, | AT, | AU, | AZ, | BA, | BB | , BG, | BR, | BY, | BZ, | CA, | CH, | CN, |
| | | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC | , EE, | ES, | FI, | GB, | GD, | GE, | GH, |
| | | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE | , KG, | KR, | ΚZ, | LC, | LK, | LR, | LS, |
| | | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW | , MX, | MZ, | NO, | NZ, | PH, | PL, | PT, |
| | | RO, | RU, | SD, | SE, | SG, | SI, | SK, | SL, | TJ | , TM, | TR, | TT, | TZ, | UA, | UG, | US, |
| | | UZ, | VN, | YU, | ZA, | zw | | | | | | | | | | | |
| | RW: | GH, | GM, | KE, | LS, | MW, | MZ, | SD, | SL, | SZ | , TZ, | UG, | ZW, | ΑT, | BE, | CH, | CY, |
| | | DE, | DK, | ES, | FI, | FR, | GB, | GR, | ΙE, | IT | , LU, | MC, | NL, | PT, | SE, | TR, | BF, |
| | | ВJ, | CF, | CG, | CI, | CM, | GA, | GN, | GQ, | GW | , ML, | MR, | ΝE, | SN, | TD, | TG | |
| | 2419 | | | | A1 | | | | | | 2001- | | | | | 0010 | |
| | 2001 | | | | | | | | | | 2001- | | | | | 0010 | |
| EF | 1320 | | | | | | | | | | 2001- | | | | | | |
| | R: | | | | | | | | | | , IT, | LI, | LU, | NL, | SE, | MC, | PT, |
| | | | | | | | RO, | | | | | | | | | | |
| | 2004 | | | | Т | | | | | | 2002- | | | | | 0010 | |
| | 2001 | | | | | | | | | | 2001- | | | | | 0010 | |
| | 2003 | | | | | | | | | US : | 2003- | 3430 | 40 | | 2 | 0030 | 127 |
| | 6767 | | | | В2 | | 2004 | 0727 | | | | | | | | | |
| PRIORIT | Y APP | LN. | INFO | . : | | | | | | | 2000- | | | | | | |
| | | | | | | | | | | WO : | 2001- | US25 | 757 | | W 2 | 0010 | 817 |
| OTHER S | OURCE | (S): | | | MAR | PAT | 136: | 2166 | 48 | | | | | | | | |

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. [I; X = C1-8 alkyl, alkylenecycloalkyl, alkylenearyl, alkyleneheteroaryl, etc.; X = C1-8 alkyl, alkylenecycloalkyl, alkylenearyl, alkyleneheteroaryl, etc.; R1 = H, C1-8 alkyl, alkylenecycloalkyl, alkylenearyl, alkyleneheteroaryl; Q = amino-tetrahydronaphthyl, aminobenzocycloheptyl, methylamino- tetrahydronaphthyl, aminoindanyl, aminobenzothiopyranyl, amino-1,4-dihydro-1,4-methanonaphthyl, etc.; n = 0, 1, 2], stereoisomers, and pharmaceutically acceptable salts are prepared as agonists of the human melanocortin receptors and, in particular, as selective agonists of the human melanocortin-4 receptor (MC-4R). Title compds. I are therefore useful for the treatment, control, or prevention of diseases and disorders responsive to the activation of MC-4R, such as obesity, diabetes, sexual dysfunction, including erectile dysfunction and female sexual dysfunction. Pharmaceutical composition including title compds. I and second active ingredient are claimed. Thus, the title compound II was prepared from 4-F-D-Phe-4-cyclohexyl-piperidine-4-carboxylic acid Et ester HCl salt and cis-1,2,3,4-tetrahydro-1-tert-butoxycarbonyl-naphthalene-2-carboxylic acid, which was prepared from 1,2-dihydroaphthalene, C1SO2NCO.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 44 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2002:143285 CAPLUS Full-text

DOCUMENT NUMBER: 136:200107

TITLE: Preparation of indoles and azaindoles as tachykinin

antagonists

INVENTOR(S): Dinnell, Kevin; Elliott, Jason Matthew; Hollingworth,

Gregory John; Shaw, Duncan Edward
PATENT ASSIGNEE(S): Merck Sharp & Dohme Ltd., UK

PATENT ASSIGNEE(S): Merck Sharp & Dohme Ltd., UK SOURCE: U.S. Pat. Appl. Publ., 26 pp.

CODEN: USXXCO Patent

DOCUMENT TYPE: LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE ----US 20020022624 A1 20020221 US 2001-903108 20010711 US 6476045 B2 20021105 GB 2000-17256 A 20000713 PRIORITY APPLN. INFO.:

OTHER SOURCE(S): CASREACT 136:200107; MARPAT 136:200107

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title compds. [I; Het = II-VI (wherein the dotted line represents an optional double bond; A completes a fused pyridine ring; and B completes a fused benzene or pyridine ring); X = O, S, H2, :NH, :N(alkyl); Y = alkylene, alkenylene, alkynylene; Z = CR5R6, NR7; R1a, R1b = H, alkyl, alkoxy, etc.; R2 = H, alkyl, fluoroalkyl, etc.; R3 = (un)substituted Ph, biphenyl, naphthyl, etc.; R4 = H, alkyl, CO, etc.; R5, R6 = H, halo, alkyl, etc.; R7 = alkyl, cycloalkyl, naphthyl, etc.] which are of particular use in the treatment or prevention of depression, anxiety, pain, inflammation, migraine, emesis or postherpetic neuralgia, were prepared Thus, treating Me 5-chloro-2-(4chlorophenyl)-1-methyl-1H- pyrrolo[2,3-b]pyridine-3-propanoate (preparation given) with LiOH in MeOH/THF/H2O followed by reaction of the resulting acid with 4-(phenylmethyl)-4-piperidinol in the presence of 1-hydroxybenzotriazole, Et3N and 1-(3-dimethylaminopropyl)-3-ethylcarbodiimide.HCl in THF afforded 83% 1-{3-[5-chloro-2-(4-chlorophenyl)-1-methyl-1H-pyrrolo[2,3-b]pyridin-3-yl]-1oxopropyl}-4-(phenylmethyl)-4-piperidinol.

L5 ANSWER 45 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2001:817246 CAPLUS Full-text

135:357843 DOCUMENT NUMBER:

TITLE: Preparation of 2-Aryl indole derivatives for use as

tachykinin receptor antagonists

INVENTOR(S): Dinnell, Kevin; Elliott, Jason Matthew; Hollingworth, Gregory John; Ridgill, Mark Peter; Shaw, Duncan Edward

PATENT ASSIGNEE(S):

SOURCE: U.S. Pat. Appl. Publ., 37 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent English

LANGUAGE: FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--------|------------|-----------------|----------|
| | | | | |
| US 20010039286 | A1 | 20011108 | US 2001-782422 | 20010213 |
| PRIORITY APPLN. INFO.: | | | GB 2000-3397 A | 20000214 |
| OTHER SOURCE(S). | MARPAT | 135.357843 | | |

GΙ

AB 2-Aryl indole derivs. I (wherein Rla, Rlb, and R2 = a variety of substituents; R3 = optionally substituted Ph, biphenyl or naphthyl or heteroaryl group; R4 = H, (C1-6)alkyl, carbonyl (=0), (CH2)pphenyl or a (C1-2)alkylene bridge across the piperidine ring; R5 and R6 = variety of substituents; or R5 and R6 together are linked so as to form an optionally substituted 5-or 6-membered ring; X = O or S, two H atoms, boxHNH or boxHN(C1-6 alkyl); Y = straight or branched (C1-4)alkylene, (C2-4)alkenylene or (C2-4)alkynylene chain; the dotted line represents an optional double bond; m = 0,1,2,3,4; n = 1,2,3,4; and p = 1, 2, 3, 4), or a pharmaceutically acceptable salt thereof, were prepared, and their use as tachykinin receptor antagonists evaluated. Thus, diisopropylethylamine and bromoacetonitrile were added to a loaded resin (synthetic preparation given) in N-methylpyrrolidinone, to which was added a solution of 6-(methylsulfonyl)spiro-[2H-1-benzopyran-2,4'-piperidin]-4(3H)-one in THF to give 1'-{3-[5-chloro-2-(4-chlorophenyl)-1H-indol-3-yl]-1-oxopropyl}-6- (methylsulfonyl)spiro(2H-1-benzopyran-2,4'-piperidin)-4(3H)-one. The compds. are of particular use in the treatment or prevention of depression, anxiety, pain, inflammation, migraine, emesis or postherpetic neuralgia. Biol. data are given.

ANSWER 46 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN 2000:880962 CAPLUS Full-text ACCESSION NUMBER:

DOCUMENT NUMBER: 134:42445

TITLE: Preparation of piperidine amino acid derivatives as

melanocortin-4 receptor agonists

INVENTOR(S): Bakshi, Raman K.; Barakat, Khaled J.; Nargund, Ravi P.; Palucki, Brenda L.; Patchett, Arthur A.; Sebhat,

Iyassu; Ye, Zhixiong; Van, Der Ploeg Leonardus H. T. Merck & Co., Inc., USA; Van Der Ploeg, Leonardus H. T.

SOURCE: PCT Int. Appl., 124 pp.

CODEN: PIXXD2 Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

DOCUMENT TYPE:

PATENT ASSIGNEE(S):

| PA: | TENT : | NO. | | | KIN | D | DATE | | | APPL | ICAT | ION : | .OV | | D | ATE | | |
|-----|--------|------|-----|-----|-----|-----|------|------|-----|------|------|-------|-----|-----|-----|------|-----|----|
| | | | | | | - | | | | | | | | | - | | | |
| WO | 2000 | 0746 | 79 | | A1 | | 2000 | 1214 | | WO 2 | 000- | US14 | 930 | | 2 | 0000 | 531 | |
| | W: | ΑE, | AG, | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BR, | BY, | CA, | CH, | CN, | CR, | |
| | | CU, | CZ, | DE, | DK, | DM, | DZ, | EE, | ES, | FI, | GB, | GD, | GE, | GH, | GM, | HR, | HU, | |
| | | ID, | IL, | IN, | IS, | JP, | KE, | KG, | KR, | KZ, | LC, | LK, | LR, | LS, | LT, | LU, | LV, | |
| | | MA, | MD, | MG, | MK, | MN, | MW, | MX, | MZ, | NO, | NZ, | PL, | PT, | RO, | RU, | SD, | SE, | |
| | | SG, | SI, | SK, | SL, | TJ, | TM, | TR, | TT, | TZ, | UA, | UG, | US, | UZ, | VN, | YU, | ZA, | zw |
| | RW: | GH, | GM, | KE, | LS, | MW, | MZ, | SD, | SL, | SZ, | TZ, | UG, | ZW, | AT, | BE, | CH, | CY, | |
| | | DE, | DK, | ES, | FI, | FR, | GB, | GR, | IE, | IT, | LU, | MC, | NL, | PT, | SE, | BF, | BJ, | |

| | 23773
11876 | 369 | CG, | CI, | CM,
A1
A1 | | GN,
2000
2002 | 1214 | | CA | , NE
2000
2000 | -23 | 377: | 369 | TG | | 2000
2000 | |
|----------|----------------|------|------|-----|-----------------|-----|---------------------|------|-----|----|----------------------|-----|------|-----|-----|----|--------------|-------|
| | R: | ΑT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | GF | , IT | , I | JI, | LU, | NL, | SE | , MC | , PT, |
| | | IE, | SI, | LT, | LV, | FΙ, | RO | | | | | | | | | | | |
| JP | 20035 | 0543 | 35 | | T | | 2003 | 0212 | | JΡ | 2001 | -51 | 123 | 28 | | | 2000 | 0531 |
| AU | 76619 | 91 | | | B2 | | 2003 | 1009 | | AU | 2000 | -53 | 306 | 8 | | | 2000 | 0531 |
| US | 6350 | 760 | | | B1 | | 2002 | 0226 | | US | 2000 | -58 | 351 | 11 | | | 2000 | 0601 |
| US | 20020 | 1376 | 564 | | A1 | | 2002 | 0926 | | US | 2001 | -99 | 04 | 99 | | | 2001 | 1121 |
| AU | 20032 | 2484 | 56 | | A1 | | 2003 | 1106 | | ΑU | 2003 | -24 | 184 | 56 | | | 2003 | 0929 |
| PRIORITY | APPI | N. : | INFO | . : | | | | | | US | 1999 | -13 | 374 | 77P | | P | 1999 | 0604 |
| | | | | | | | | | | US | 1999 | -16 | 592 | 09P | | P | 1999 | 1202 |
| | | | | | | | | | | WO | 2000 | -US | 14 | 930 | | W | 2000 | 0531 |
| | | | | | | | | | | US | 2000 | -58 | 351 | 11 | | A3 | 2000 | 0601 |
| OTHER SO | URCE | (S): | | | MARP. | AΤ | 134: | 4244 | 5 | | | | | | | | | |

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Piperidine derivs. I [R2C2 = arvl, 5- or 6-membered heteroarvl or heterocyclyl, 5- to 7-membered carbocyclyl, which may be substituted; L = (CRb2)m, where Rb = H, alkyl, (CH2)n-cycloalkyl or -aryl; m = 0-2, n = 0-3; X, Y = (CH2)0-2; Ra = H, alkyl, (CHRb)n-cycloalkyl, -aryl, -heteroaryl, -O(CHRb)naryl, which may be substituted; Re = H, alkyl, (CH2)n-aryl, cycloalkyl, -heteroaryl, which may be substituted, acyl, sulfonyl, etc.; R1 = H, alkyl, (CH2)n-cycloalkyl, -aryl, -heteroaryl, -heterocyclyl; R2 = any group given for R1, CN, (CH2)n-carboxamido, -carboxy, -acylamino, sulfonylamino, amino, etc.] were prepared as agonists of the human melanocortin receptors, in particular, the human melanocortin-4 receptor (MC-4R). They are therefore useful for the treatment, control, or prevention of diseases and disorders responsive to the activation of MC-4R, such as obesity, diabetes, sexual dysfunction, including erectile dysfunction and female sexual dysfunction. Thus, II trifluoroacetate, prepared by coupling of Et 1-(D-4chlorophenylalanyl)-4- cyclohexyl-4-[(1,2,4-triazol-1-yl)methyl]piperidine trifluoroacetate (preparation given) with N-tert-butoxycarbonyl-1,2,3,4tetrahydroisoquinoline-3- carboxylic acid (Boc-D-Tic), was > 2,200-fold, > 10,000-fold, and > 580-fold selective for the human MC-4R over human MC-1R, MC-2R, and MC-3R, resp.

REFERENCE COUNT:

THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 47 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2000:874202 CAPLUS Full-text DOCUMENT NUMBER: 134:29410

TITLE:

Preparation of oxazolidinones and related compounds as

adrenergic alA receptor antagonists

Lagu, Bharat; Dhar, Tg Murali; Nagarathnam, INVENTOR(S):

Dhanapalan; Jeon, Yoon T.; Marzabadi, Mohammad R.;

Wong, Wai C.; Gluchowski, Charles

PATENT ASSIGNEE(S): Synaptic Pharmaceutical Corporation, USA

SOURCE: U.S., 74 pp.

CODEN: USXXAM DOCUMENT TYPE: Patent LANGUAGE · English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--------|-----------|------------------|----------|
| | | | | |
| US 6159990 | A | 20001212 | US 1998-99225 | 19980617 |
| US 6620815 | B1 | 20030916 | US 2000-636518 | 20000810 |
| PRIORITY APPLN. INFO.: | | | US 1997-50096P P | 19970618 |
| | | | US 1998-99225 A1 | 19980617 |
| OTHER SOURCE(S): | MARPAT | 134:29410 | | |

X1 NZR1 R2 R2 R5

AB Title compds. [I, X = 0, S; XI = 0, S, NH; R2 = H, (CH2)rXR3, CO2R3, alkyl, aminoalkyl, alkenyl, alkynyl, etc.; r = 1-4; R3 = H, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkyl, etc.; R5 = H, (substituted) aryl, heteroaryl, aralkyl, heteroarylalkyl, etc.; R5 = H, (substituted) aryl, aralkyl, heteroarylalkyl, etc.; R5 = H, (substituted) aryl, aralkyl, heteroarylalkyl, cycloalkyl, heterocyclyl; Z = (substituted) aryl, indanyl, tetrahydronaphrhyl, cycloalkyl, heterocyclyl; Z = (substituted) aryl, alkenyl linker; R1 = (substituted) arylpiperidinyl, arylpiperainyl, etc.], were prepared Thus, 4-(3,4-difluorophenyl)oxazolidin-2-one was stirred with NaH in THF/HMPA followed by addition of 1,5-dibromopentane to give 50% 4-(3,4-difluorophenyl)-1-(5-bromopentyl)oxazolidin-2-one. this was refluxed with K2CO3 and 1-(2-methoxyphenyl)piperazin-1 yllpentyl)oxazolidin-2-one. The latter bound

to human α1A, α1D α1B receptors with Ki = 0.5, 11, and 21, resp.

REFERENCE COUNT: 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 48 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2000:643016 CAPLUS Full-text

DOCUMENT NUMBER: 133:22305

TITLE: Preparation of amino acid amide derivatives for use as

calcitonin gene-related peptide antagonists in

pharmaceutical compositions

Eberlein, Wolfgang; Rudolf, Klaus; Engel, Wolfhard;

Doods, Henri; Hallermayer, Gerhard

PATENT ASSIGNEE(S): Boehringer Ingelheim Pharma K.-G., Germanv

SOURCE: Ger. Offen., 36 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: Fatent

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

INVENTOR(S):

PATENT NO. KIND DATE APPLICATION NO. DATE DE 19911039 A1 20000914 DE 1999-19911039 19990312 CA 2361939 A1 20000921 CA 2000-2361939 20000308 20000921 WO 2000055154 A1 WO 2000-EP2004 20000308

```
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
             CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
             IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
             MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
             SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
             DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
             CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     EP 1163239
                          A1
                                20011219
                                            EP 2000-922505
                                                                   20000308
     EP 1163239
                          В1
                                20030528
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
     JP 2002539208
                          Т
                                20021119
                                            JP 2000-605583
                                                                    20000308
     JP 3719937
                          R2
                                20051124
     AT 241616
                          т
                                20030615
                                            AT 2000-922505
                                                                    20000308
     PT 1163239
                          Т
                                20031031
                                            PT 2000-922505
                                                                    20000308
     ES 2199819
                          Т3
                                20040301
                                            ES 2000-922505
                                                                    20000308
     US 6313097
                          В1
                                20011106
                                            US 2000-523472
                                                                    20000310
     MX 2001PA07986
                          Α
                                20020108
                                            MX 2001-PA7986
                                                                    20010807
PRIORITY APPLN. INFO.:
                                            DE 1999-19911039
                                                                A 19990312
                                            US 1999-129937P
                                                                P 19990419
                                            WO 2000-EP2004
                                                                W 20000308
OTHER SOURCE(S):
                        MARPAT 133:223053
GΙ
```

AB Title compds., e.g.(I; see patent for general claims), were prepared and tested as CGRP antagonists for use in pharmaceutical prepns. for treatment of headache, non-insulin dependent diabetes mellitus, cardiovascular diseases, skin diseases, inflammatory diseases, allergic rhinitis, asthma, morphine tolerance, and menopausal hot flashes (formulations given), and for use as diagnostic or anal. aides in RIA or ELISA assays and as diagnostic or analytic auxiliary agents in neurotransmitter research. Thus, di-Ph methanesulfonylimidocarbonate was reacted with 1-(4-amino-3,5-dibromo-D-phenylalanyl)-4-(1-piperidinyl)piperidine (as the bis-trifluoroacetate salt), and the product further reacted with 3,4-dihydro-3-(4-piperidinyl)-2(IH) - quinazolinone to give I (27%). In in vitro tests of human calcitonin gene related peptide (CGRP) receptor binding using Sk-N-MC-cells, title compds. had ICSO ≤ 104 MM, and in the same system, had CGRP-antagonist activity at doses from 10-11-10-5M.

Ι

L5 ANSWER 49 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2000:314546 CAPLUS Full-text

DOCUMENT NUMBER: 132:321801

Preparation of 4-[(benzoylamino)methyl]piperidines and analogs as potassium channel inhibitors

INVENTOR(S): Bao, Jianming; Kayser, Frank; Kotliar, Andrew;

Parsons, William H.; Rupprecht, Kathleen M.; Claiborne, Christopher F.; Liverton, Nigel; Claremon,

David A.; Thompson, Wayne J.

PATENT ASSIGNEE(S): Merck & Co., Inc., USA SOURCE: PCT Int. Appl., 91 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

TITLE:

| PAT | TENT : | NO. | | | KIN | D | DATE | | | | LICAT | | | | D. | ATE | |
|----------|--------|------|------|-----|-----|-----|------|------|-----|------|--------|-------|-----|-----|-----|------|-----|
| WO | 2000 | 0257 | 86 | | A1 | | 2000 | 0511 | | | 1999- | | | | 1 | 9991 | 026 |
| | W: | ΑE, | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BR, | BY, | CA, | CH, | CN, | CR, | CU, |
| | | CZ, | DE, | DK, | DM, | EE, | ES, | FI, | GB, | GD, | GE, | GH, | GM, | HR, | HU, | ID, | IL, |
| | | IN, | IS, | JP, | ΚE, | KG, | KR, | ΚZ, | LC, | LK, | LR, | LS, | LT, | LU, | LV, | MA, | MD, |
| | | MG, | MK, | MN, | MW, | MX, | NO, | ΝZ, | PL, | PT, | , RO, | RU, | SD, | SE, | SG, | SI, | SK, |
| | | SL, | ΤJ, | TM, | TR, | TT, | TZ, | UA, | UG, | US, | UZ, | VN, | YU, | ZA, | zw | | |
| | RW: | GH, | GM, | KE, | LS, | MW, | SD, | SL, | SZ, | TZ, | UG, | ZW, | ΑT, | BE, | CH, | CY, | DE, |
| | | DK, | ES, | FI, | FR, | GB, | GR, | ΙE, | ΙT, | LU, | MC, | NL, | PT, | SE, | BF, | ВJ, | CF, |
| | | CG, | CI, | CM, | GΑ, | GN, | GW, | ML, | MR, | NE, | SN, | TD, | TG | | | | |
| US | 6303 | 637 | | | B1 | | 2001 | 1016 | | US 1 | 1999- | 4225 | 00 | | 1 | 9991 | 021 |
| CA | 2348 | 735 | | | A1 | | 2000 | 0511 | | CA 1 | 1999-: | 2348 | 735 | | 1 | 9991 | 026 |
| CA | 2348 | | | | | | 2007 | | | | | | | | | | |
| EP | 1126 | 849 | | | A1 | | 2001 | 0829 | | EP 1 | 1999- | 9551 | 69 | | 1 | 9991 | 026 |
| EP | 1126 | 849 | | | B1 | | 2005 | 0309 | | | | | | | | | |
| | R: | ΑT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | GR, | IT, | LI, | LU, | NL, | SE, | MC, | PT, |
| | | ΙE, | SI, | LT, | LV, | FΙ, | RO | | | | | | | | | | |
| JP | 2002 | 5285 | 03 | | T | | 2002 | 0903 | | JP 2 | 2000- | 5792: | 27 | | 1 | 9991 | 026 |
| | 7645 | | | | | | 2003 | 0821 | | AU 2 | 2000- | 1133 | 8 | | 1 | 9991 | 026 |
| AT | 2903 | 82 | | | T | | 2005 | 0315 | | AT 1 | 1999- | 9551 | 69 | | 1 | 9991 | 026 |
| PRIORITY | Y APP | LN. | INFO | .: | | | | | | US 1 | 1998- | 1062 | 92P | 1 | P 1 | 9981 | 030 |
| | | | | | | | | | | WO 1 | 1999-1 | JS25 | 066 | 1 | 7 I | 9991 | 026 |
| OTHER SO | DURCE | (S): | | | MAR | PAT | 132: | 3218 | 01 | | | | | | | | |

$$\mathbb{R}^{1} \underbrace{\mathbb{R}^{2}}_{\mathbb{Z}^{1}_{\mathbb{Z}} \mathbb{R}^{3}} \mathbb{R}^{3}$$

AB Title compds. [I, Rl = CHZNR10CDR6; R2,R6 = (un)substituted Ph; R3,R4 = H, halo, alkyl, acyl, etc.; R10 = H, alkyl, acyl, etc.; Z = 0, S00-2, NR5; R5 = H, OH, alkyl, acyl, etc.; Z1,Z2 = bond, CH2, CH2CH2] were prepared as potassium channel inhibitors (no data). Thus, 4-cyano-1-benzyl-4-phenylpiperidine was reduced and the product N-acylated by 2-(MeO)C6H4COCl to

give, after deprotection and Ac2O acylation, 2-(MeO)C6H4CONHCH2Z3Ac (Z3 = 4-

phenylpiperidine-4,1-diyl). REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 50 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1999:811218 CAPLUS Full-text

DOCUMENT NUMBER:

132:49974

TITLE:

Preparation of heterocyclic compounds as hypoglycemic agents

INVENTOR(S):

Suzuki, Mikio; Ohdoi, Keisuke; Kato, Katsuhiro; Matsumoto, Hiromitsu; Tovama, Koji; Kitahara, Masaki;

Yotsumoto, Takashi

PATENT ASSIGNEE(S): Nissan Chemical Industries, Ltd., Japan

SOURCE: PCT Int. Appl., 227 pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

GI

| PATENT NO. | KIND DATE | | APPLICATION NO. | DATE |
|------------------------|-----------|--------------|-------------------|-----------------|
| WO 9965881 | A1 | 19991223 | WO 1999-JP3214 | 19990616 |
| W: AU, CA, CN, | CZ, FI | , HU, IL, KR | , LT, MX, NO, NZ, | RO, RU, SI, SK, |
| UA, US, ZA | | | | |
| | CY, DE | , DK, ES, FI | , FR, GB, GR, IE, | IT, LU, MC, NL, |
| PT, SE | | | | |
| JP 2001031652 | A | 20010206 | JP 1999-172366 | 19990618 |
| PRIORITY APPLN. INFO.: | | | JP 1998-172435 | A 19980619 |
| | | | JP 1999-140693 | A 19990520 |
| OTHER SOURCE(S): | MARPAT | 132:49974 | | |

$$\begin{array}{c} \mathbb{R}^{1} \\ \mathbb{R}^{1} \\ \mathbb{R}^{2} \\ \mathbb{R}^{3} \\ \mathbb{R}^{2} \\ \mathbb{R}^{1} \end{array}$$

AB The title compds. [I; A = CH[(CH2)mR1](CH2)nR2, II, III (wherein m, n, n1, n2 = 0-3; R1 = H, halo, NO2, etc.; R2 = H, halo, NO2, etc.; R3, R31 = alkyl; R4 = H, alkyl, acyl, etc.); D = a bond, CH2, O, etc.; X1-X5 = N, CR5 (R5 = H, halo,

etc.)] having a hypoglycemic effect, and therefore useful for preventing and treating diabetes and diabetic complications, were prepared and formulated. Thus, reacting 2,6-dichloro-4-(2-phenoxyethoxy)pyrimidine (preparation given) with Me 3(R)-amino-4-(tert- butoxycarbonylamino)butyrate afforded 86% (R)-IV which showed 53.4% carnitine-palmitoyl transferase (CPT) inhibition at 30 µM. PROP COUNTY.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 51 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1999:736657 CAPLUS Full-text

DOCUMENT NUMBER: 131:336948

TITLE: Preparation of piperidine derivatives with growth

hormone releasing properties

INVENTOR(S): Hansen, Thomas Kruse; Ankersen, Michael

PATENT ASSIGNEE(S): Novo Nordisk A/S, Den. SOURCE: PCT Int. Appl., 87 pp.

CODEN: PIXXD2 DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

| PA | PATENT NO. | | | | KIND DATE | | APPLICATION NO. | | | | | | DATE | | | | |
|---------|------------|------|------|-----|-----------|-----|-----------------|------|-----|----|-------------------------|------|------|-----|-----|------|-----|
| | 9958 | 501 | | | A1 | | 1999 | 1118 | | WO | 1999- | DK26 | 0 | | 1 | 9990 | 510 |
| | W: | ΑE, | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG | , BR, | BY, | CA, | CH, | CN, | CU, | CZ, |
| | | DE, | DK, | EE, | ES, | FI, | GB, | GD, | GE, | GH | , GM, | HR, | HU, | ID, | IL, | IN, | IS, |
| | | JP, | KΕ, | KG, | KP, | KR, | KZ, | LC, | LK, | LR | , LS, | LT, | LU, | LV, | MD, | MG, | MK, |
| | | MN, | MW, | MX, | NO, | NZ, | PL, | PT, | RO, | RU | , SD, | SE, | SG, | SI, | SK, | SL, | TJ, |
| | | | | | | | UZ, | | | | | | | | | | |
| | RW: | GH, | GM, | KΕ, | LS, | MW, | SD, | SL, | SZ, | UG | , ZW, | AT, | BE, | CH, | CY, | DE, | DK, |
| | | | | | | | | | | | , NL, | | | | | | |
| | | CI, | CM, | GA, | GN, | GW, | ML, | MR, | NE, | SN | , TD, | TG | | | | | |
| US | 6303 | 620 | | | B1 | | 2001 | 1016 | | US | 1999-
1999- | 3061 | 51 | | 1 | 9990 | 506 |
| CA | 2329 | 881 | | | A1 | | 1999 | 1118 | | CA | 1999- | 2329 | 881 | | 1 | 9990 | 510 |
| AU | 9937 | 010 | | | A | | 1999 | 1129 | | AU | 1999- | 3701 | 0 | | 1 | 9990 | 510 |
| AU | 7572 | 17 | | | B2 | | 2003 | 0206 | | | | | | | | | |
| BR | 9910 | 329 | | | A | | 2001 | 0130 | | BR | 1999- | 1032 | 9 | | 1 | 9990 | 510 |
| EP | 1077 | 941 | | | A1 | | 2001 | 0228 | | EP | 1999-
1999-
1999- | 9191 | 25 | | 1 | 9990 | 510 |
| | R: | AT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | GR | , IT, | LI, | LU, | NL, | SE, | PT, | IE, |
| | | SI, | LT, | FI, | RO | | | | | | | | | | | | |
| HU | 2001 | 0020 | 71 | | A2 | | 2002 | 0328 | | HU | 2001- | 2071 | | | 1 | 9990 | 510 |
| HU | 2001 | 0020 | 71 | | A3 | | 2002 | 0628 | | | | | | | | | |
| JP | 2004 | 5003 | 12 | | T | | 2004 | 0108 | | JP | 2000- | 5483 | 05 | | 1 | 9990 | 510 |
| RU | 2243 | 215 | | | C2 | | 2004 | 1227 | | RU | 2000- | 1311 | 84 | | 1 | 9990 | 510 |
| PL | 1945 | 60 | | | B1 | | 2007 | 0629 | | PL | 1999- | 3440 | 42 | | 1 | 9990 | 510 |
| TW | 2229 | 69 | | | В | | 2004 | 1101 | | TW | 1999- | 8810 | 8436 | | 1 | 9990 | 524 |
| ZA | 2000 | 0058 | 20 | | A | | 2001 | 0904 | | ZA | 2000- | 5820 | | | 2 | 0001 | 019 |
| MX | 2000 | PA10 | 585 | | A | | 2001 | 0419 | | MX | 2000- | PA10 | 585 | | 2 | 0001 | 027 |
| IN | 2000 | CN00 | 621 | | A | | 2005 | 0304 | | IN | 2000- | CN62 | 1 | | 2 | 0001 | 108 |
| | | | | | | | | | | NO | 2000- | 5668 | | | 2 | 0001 | 110 |
| NO | 3180 | 80 | | | B1 | | 2005 | 0131 | | | | | | | | | |
| PRIORIT | Y APP | LN. | INFO | . : | | | | | | DK | 1998- | 636 | | | A 1 | 9980 | 511 |
| | | | | | | | | | | DK | 1998- | 875 | | | A 1 | 9980 | 701 |
| | | | | | | | | | | US | 1998- | 8588 | 6P | | P 1 | 9980 | 518 |
| | | | | | | | | | | | 1998- | | | | | 9980 | 518 |
| | | | | | | | | | | WO | 1998- | PA87 | 5 | | A 1 | 9980 | 701 |
| | | | | | | | | | | WO | 1999- | DK26 | 0 | | W 1 | 9990 | 510 |
| OTHER S | OHDOR | (8). | | | MADI | TAC | 131. | 3360 | | | | | | | | | |

OTHER SOURCE(S):

$$\begin{array}{c|c} \text{CH2} \text{ mG} & \text{CH2} \text{ n} \\ \text{DCON} & \text{CON} & \text{CH2} \text{ n} \\ \text{COM} & \text{CH2} \text{ p} \end{array}$$

AB Disubstituted piperidine compds. I [R1 = H, alky1; m, q = 0-3; n, p = 0-5; D = R2NH.(CR3R4)e(CH2)fM(CHR5)g(CH2)h; G = 0(CH2) kR6, substituted heterocyclyl or Ph or naphthyl; J = 0(CH2)1R13, substituted heterocyclyl or Ph or naphthyl; E = CONR18, CO2R19, etc.], with growth hormone releasing properties, were prepared E.g., 1-(1(ZR)-2-[N-((ZE)-2-maino-5-methylhex-2-enoy1)-N-methylaminol-3-(2-naphthyl)propiony1)-4- benzylpiperidine-4-carboxylic acid methylamide was prepared

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 52 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1999:227936 CAPLUS Full-text

DOCUMENT NUMBER: 130:282070

TITLE: Preparation of N-[[l-(4-cyanobenzyl)-lH-imidazol-5-yl]methyl]piperidines and analogs as farnesyl protein transferase inhibitors

INVENTOR(S): Anthony, Neville J.; Gomez, Robert P.; Wai, John S.;

Embrey, Mark W.; Fisher, Thorsten E.

PATENT ASSIGNEE(S): Merck and Co., Inc., USA SOURCE: U.S., 91 pp.

CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--------|------------|-------------------|----------|
| | | | | |
| US 5891889 | A | 19990406 | US 1997-831308 | 19970401 |
| US 6248756 | B1 | 20010619 | US 1999-248883 | 19990211 |
| PRIORITY APPLN. INFO.: | | | US 1996-14791P P | 19960403 |
| | | | US 1997-831308 A3 | 19970401 |
| OTHER SOURCE(S): | MARPAT | 130:282070 | | |

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The invention is directed to compds. which inhibit farnesyl-protein transferase (FPTase) and the farnesylation of the oncogene protein Ras. The invention is further directed to chemotherapeutic compns. containing the compds, and methods for inhibiting FPTase and Ras farnesylation using them. In particular, title compds. I and II and their pharmaceutically acceptable salts are claimed [wherein Ar = (un)substituted Ph; RI = H, Me; QI = (un)substituted (CH2)O-4; X = bond, CH2, CO, (un)substituted NHCO, S, SO, or SO2; Y = H, (un)substituted alkyl, OH or derivs., SH or derivs., NH2 or derivs., etc.; XI = bond, (un)substituted NHCO or NH, O, S, SO, SO2; Al, A2 =

bond, CH:CH, CO, O, (alkyl)imino, etc.; Q2 = (un) substituted (CH2)0-2; Z = (un)(un) substituted aryl; addnl. substituents allowed on piperidine ring]. Over 130 invention compds. and numerous intermediates were prepared For instance, the invention compound III was claimed in particular, and was prepared in 5 steps. Thus, Et isonipecotate underwent a sequence of: (1) N-protection with BOC; (2) deprotonation and alkylation in the 4-position using NaN(SiMe3)2 and 3-(CF30)C6H4CH2Br; (3) reduction of the Et ester to a hydroxymethyl group using LiAlH4; (4) removal of the BOC group with HCl; and (5) reductive alkylation at N using 1-(4-cyanobenzyl)imidazole-5-carboxaldehyde and NaBH3CN, yielding III after chromatog. In a test for inhibition of farnesylation of Ras-CVIM with human FPTase in vitro, almost all example compds. had IC50 of ≤ 50 uM.

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 53 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:8509 CAPLUS Full-text

DOCUMENT NUMBER: 130:38399

TITLE: Preparation of spiro[furo[2,3-f]indole-7,4'-

piperidine] derivatives and analogs as 5-HT1B/1D antagonists

INVENTOR(S): Halazy, Serge; Lamothe, Marie; Jorand, Lebrun Catherine

PATENT ASSIGNEE(S):

Pierre Fabre Medicament, Fr. SOURCE: Fr. Demande, 39 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent LANGUAGE: French FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--------|-----------|-----------------|----------|
| | | | | |
| FR 2761069 | A1 | 19980925 | FR 1997-3410 | 19970320 |
| PRIORITY APPLN. INFO.: | | | FR 1997-3410 | 19970320 |
| OTHER SOURCE(S): | MARPAT | 130:38399 | | |

AB Title compds. [I; R2,R3 = H; R2R3 = CH2CH2 or CH:CH; Z = XZ2R; R = (un) substituted Ph, -naphthyl, -pyridinyl; XY = NCH2, NCH2CH2, C:CH, CR1CH2; R1 = H, halo, alkyl, alkoxy, etc.; Z1 = CO, SO2, (CH2)m+1, CO(CH2)m, (CH2)mCO, etc.; Z2 = bond, (CH2)n, CO, (CH2)nCO, etc.; m,n = 1-6] were prepared Thus, 1'-methyl-2,3,6,7-tetrahydrospiro[furo[2,3-f]indole-7,4'-piperidine] was Nacylated by 1-chlorocarbony1-4-(2,3- dimethylphenyl)piperazine to give I (R2R3 = CH2CH2, Y = CH2, Z = NC6H3Me2-2,3, Z1 = CO). Data for biol. activity of I were given.

L5 ANSWER 54 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1997:798591 CAPLUS Full-text

DOCUMENT NUMBER: 128:13439

ORIGINAL REFERENCE NO.: 128:2625a,2628a

TITLE: Preparation of serine derivatives useful as tachykinin

antagonists

INVENTOR(S): Elliott, Jason Matthew; Macleod, Angus Murray;

Stevenson, Graeme Irvine

PATENT ASSIGNEE(S): Merck Sharp & Dohme Limited, UK

Brit. UK Pat. Appl., 80 pp. SOURCE: CODEN: BAXXDU

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PATENT NO.

APPLICATION NO. DATE KIND DATE GB 2309458 19970730 GB 1997-1206 19970121 А US 5885999 US 1997-786522 19970121 Α PRIORITY APPLN. INFO .: GB 1996-1724 A 19960129

CASREACT 128:13439; MARPAT 128:13439

OTHER SOURCE(S):

GI

Title compds. I [m = 0-2; n = 0, 1; with the proviso that m + n = 1 or 2; R1 = 0AB Ph, naphthyl, Ph2CH, PhCH2, where the naphthyl or any Ph moiety may be substituted; R2 = H. Ph. heteroarvl such as indazolvl, thienvl, furanvl, pyridyl, thiazolyl, tetrazolyl, quinolinyl, naphthyl, Ph2CH, PhCH2, wherein each heteroaryl, the naphthyl and any Ph moiety may be substituted; R3, R4 = independently H, C1-6 alkyl; R3R4 = C1-3 alkylene chain; Q = CR5R6, NR5; X = Y = H; XY = O; Z = bond, O, S, S(O), SO2, NR7 or CR7R8; R7, R8 = independently H, C1-6 alkyl] or pharmaceutically acceptable salts thereof are of particular use in the treatment or prevention of pain, inflammation, migraine, emesis and postherpetic neuralgia. Thus, coupling of (S)-2-tert-butoxycarbonylamino-3-(3,4- dichlorobenzyloxy) propionic acid with 4-(2-keto-1benzimidazolinyl)piperidine, followed by acidic deprotection and reductive benzylation with benzaldehyde and sodium borohydride gave serine derivative II as its HCl salt. The compds. prepared here are active with IC50 at the NKl receptor of less than 1 uM.

ACCESSION NUMBER: 1995:994586 CAPLUS Full-text DOCUMENT NUMBER: 124:117093

ORIGINAL REFERENCE NO.: 124:21809a,21812a

TITLE: Preparation of N-[(3,4-dichlorophenyl)propyl]piperidin

e selective human NK3-receptor antagonists INVENTOR(S): Bichon, Daniel; Van, Broeck Didier; Proietto, Vincenzo; Gueule, Patrick; Emonds-Alt, Xavier

PATENT ASSIGNEE(S): SANOFI, Fr.

SOURCE: Eur. Pat. Appl., 61 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Pat.ent. LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | |
|--------------------------|---------|----------------------|----------------------------------|----------------------------|
| | | | EP 1995-400590 | |
| EP 673928 | | 20010829 | | |
| | | | B, GR, IE, IT, LI, LU | |
| FR 2717477 | A1 | 19950922 | FR 1994-3193 | 19940318 |
| FR 2717477 | B1 | 19960607 | | |
| FR 2717478 | | 19950922 | FR 1994-9478 | 19940729 |
| FR 2717478 | | 19960621 | | |
| | A1 | 19951103 | FR 1995-571 | 19950119 |
| FR 2719311 | | 19980626 | | |
| | | 20030228 | | |
| FI 9501265 | | 19950919 | FI 1995-1265 | 19950317 |
| FI 116621 | B1 | 20060113 | | |
| NO 9501044 | A | 19950919 | NO 1995-1044 | 19950317 |
| AU 9514909 | A | 19950928 | AU 1995-14909 | 19950317 |
| | | 19980709 | | |
| ZA 9502228 | A | 19951221 | ZA 1995-2228 | 19950317 |
| HU 72065 | A2 | 19960328 | HU 1995-806 | 19950317 |
| CN 1128756 | A | 19960814 | CN 1995-103542 | 19950317 |
| CN 1056605 | В | 20000920 | | |
| | A | 19990620 | IL 1995-113026 | |
| | C1 | 19991227 | RU 1995-103737 | 19950317 |
| AT 204863 | T | 20010915 | AT 1995-400590
PT 1995-400590 | 19950317
19950317 |
| PT 673928 | T | 20020228 | | 19950317 |
| ES 2164746 | | 20020301 | | |
| TW 380138 | В | 20000121 | TW 1995-84102614 | |
| | A1 | 19950919 | CA 1995-2145000 | 19950320 |
| CA 2145000 | C | 20020507 | | |
| JP 08048669 | A | 19960220 | JP 1995-61419 | 19950320 |
| | B2 | 19990726 | WG 1006 607076 | 10000000 |
| US 5741910 | A | 19980421 | US 1996-607976 | 19960229 |
| US 5942523 | A | 19990824 | US 1996-608718
NO 1997-5089 | 19960229 |
| NO 9705089 | A | 19950919
20020315 | | 19971104 |
| HK 1005137 | | | | |
| US 6124316
US 6294537 | A
D1 | 20000926 | | |
| | BI | 20010925 | US 1999-306821 | 19990507 |
| PRIORITY APPLN. INFO.: | | | FR 1994-3193
FR 1994-9478 | A 19940318 |
| | | | FR 1994-9478
FR 1995-571 | |
| | | | FK 1995-5/1 | A 19950119
A3 19950317 |
| | | | US 1995-405833
US 1997-880832 | A3 19950317
B1 19970623 |
| | | | US 1997-880832 | BI 19970623 |

AB The title compds. [I; A = direct bond, CH2, CH2CH2, CH:CH; A1 = (un) substituted 2-pyridyl or Ph; R1 = Me; R2 = HO, alkoxy, CN, (un) substituted NH2, etc.; R11 = H; such that R1R11 = (CH2)3] (e.g., II; m.p. 184°), useful as human NK3-receptor antagonists (no data) for the treatment of neurokinin Binduced diseases (no data), are prepared

L5 ANSWER 56 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1995:916500 CAPLUS Full-text 123:313779

DOCUMENT NUMBER:

ORIGINAL REFERENCE NO.: 123:56247a,56250a

TITLE:

Preparation of geminal-disubstituted azacyclic

tachykinin antagonists

INVENTOR(S): Baker, Raymond; Lewis, Richard Thomas; Macleod, Angus Murray; Stevenson, Graeme Irvine

Merck Sharp and Dohme Ltd., UK

SOURCE: PCT Int. Appl., 75 pp. CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT ASSIGNEE(S):

| PA | TENT | NO. | | | KIN | D | DATE | | | APPL | ICAT | ION : | NO. | | D. | ATE | |
|----|------|-----|-----|-----|-----|-----|------|------|-----|------|------|-------|-----|-----|-----|------|-----|
| | | | | | | _ | | | | | | | | | _ | | |
| WC | 9519 | 344 | | | A1 | | 1995 | 0720 | | WO 1 | 995- | GB57 | | | 1 | 9950 | 112 |
| | W: | AM, | AT, | AU, | BB, | BG, | BR, | BY, | CA, | CH, | CN, | CZ, | DE, | DK, | EE, | ES, | FI, |
| | | GB, | GE, | HU, | JP, | KE, | KG, | KP, | KR, | KZ, | LK, | LR, | LT, | LU, | LV, | MD, | MG, |
| | | MN, | MW, | MX, | NL, | NO, | NZ, | PL, | PT, | RO, | RU, | SD, | SE, | SI, | SK, | ΤJ, | TT, |
| | | UA, | US | | | | | | | | | | | | | | |
| | RW: | KE, | MW, | SD, | SZ, | AT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | GR, | IE, | IT, | LU, |
| | | MC, | NL, | PT, | SE, | BF, | BJ, | CF, | CG, | CI, | CM, | GA, | GN, | ML, | MR, | NE, | SN, |
| | | TD, | TG | | | | | | | | | | | | | | |
| CA | 2180 | 746 | | | A1 | | 1995 | 0720 | | CA 1 | 995- | 2180 | 746 | | 1 | 9950 | 112 |
| AU | 9513 | 902 | | | A | | 1995 | 0801 | | AU 1 | 995- | 1390 | 2 | | 1 | 9950 | 112 |
| AU | 6852 | 12 | | | B2 | | 1998 | 0115 | | | | | | | | | |

| | 739336
739336 | | | A1
B1 | | 61030 | EP | 1995- | 905204 | | 1 | 19950 | 112 |
|----------|------------------|-------|-----|----------|-------|-------|-------|--------|---------|-----|-----|-------|-----|
| | R: AT | , BE, | CH, | | | | GB, G | R, IE, | IT, LI, | LU, | NL, | PT, | SE |
| JP | 0950750 | 0 | | T | 199 | 70729 | JP | 1995- | 518907 | | 1 | 19950 | 112 |
| AT | 170174 | | | T | 199 | 80915 | AT | 1995- | 905204 | | 1 | 19950 | 112 |
| ES | 2120170 | | | T3 | 199 | 81016 | ES | 1995- | 905204 | | 1 | 19950 | 112 |
| US | 5760018 | | | A | 199 | 80602 | US | 1996- | 676152 | | 3 | 19960 | 711 |
| PRIORITY | APPLN. | INFO | . : | | | | GB | 1994- | 542 | ž | A 1 | 19940 | 113 |
| | | | | | | | GB | 1994- | 3072 | ž | A 1 | 19940 | 217 |
| | | | | | | | WO | 1995- | GB57 | 1 | N 1 | 19950 | 112 |
| OTHER SO | URCE(S) | : | | MARPA' | T 123 | :3137 | 79 | | | | | | |

OTHER SOURCE(S): MARPAT 12 GI

AB The title compds. [I, Al, A2 = H, C1-4 alkyl; m = 2-4; n = 0-2; Rl, R2 = (un)substituted Ph; R3 = H, COR9, COZR10, COCORNIORII, COCOZR10, SOZR15, etc.; R4 = C1-6 alkyl substituted by a hydroxy group, (CH2)pNR10R11, COZR16, CORR10R11, etc.; R5 = H, C1-6 alkyl; R6, R7 = H, C1-6 alkyl; R9 = alkyl, cycloalkyl, Ph; R10, R11 = H, alkyl; R15 = alkyl, C73, (un)substituted Ph; R16 = alkyl; p = 1-4; X = 0, (un)substituted NNI) useful as tachykinin antagonists (no data) for the treatment of pain (no data), inflammation (no data), migraine (no data), and emesis (no data), are prepared Thus, 4-phenyl-4-[[1-[3,5-(trifluoromethyl)]-bnyl]-2- hydroxyethoxy)methyl]piperidine thought of the part o

L5 ANSWER 57 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1994:605217 CAPLUS Full-text DOCUMENT NUMBER: 121:205217

ORIGINAL REFERENCE NO.: 121:37365a,37368a

TITLE: 4-(aminomethyl/thiomethyl/sulfonylmethyl)-4-

phenylpiperidine tachykinin receptor antagonists
INVENTOR(S): Macleod, Angus Murray; Stevenson, Graeme Irvine

PATENT ASSIGNEE(S): Merck Sharp and Dohme Ltd., UK

SOURCE: PCT Int. Appl., 61 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

| WO | 9413 | 639 | | | A1 | | 1994 | 0623 | | WO | 1993- | GB25 | 35 | | | 19931 | 210 |
|----------|-------|------|------|-----|------|-----|------|------|-----|----|--------|------|-----|-----|-----|-------|-----|
| | W: | AU, | CA, | JP, | US | | | | | | | | | | | | |
| | RW: | AT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | GI | R, IE, | IT, | LU, | MC, | NL | PT, | SE |
| CA | 2150 | 951 | | | A1 | | 1994 | 0623 | | CA | 1993- | 2150 | 951 | | | 19931 | 210 |
| AU | 9456 | 573 | | | A | | 1994 | 0704 | | AU | 1994- | 5657 | 3 | | | 19931 | 210 |
| AU | 6828 | 38 | | | B2 | | 1997 | 1023 | | | | | | | | | |
| EP | 6733 | 67 | | | A1 | | 1995 | 0927 | | EP | 1994- | 9020 | 65 | | | 19931 | 210 |
| | R: | ΑT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | GF | R, IE, | IT, | LI, | LU, | NL | PT, | SE |
| JP | 0850 | 4435 | | | T | | 1996 | 0514 | | JΡ | 1993- | 5139 | 51 | | | 19931 | 210 |
| US | 5661 | 162 | | | A | | 1997 | 0826 | | US | 1995- | 4486 | 22 | | | 19950 | 606 |
| PRIORIT: | Y APP | LN. | INFO | . : | | | | | | GB | 1992- | 2601 | 4 | | Α : | 19921 | 214 |
| | | | | | | | | | | GB | 1993- | 1372 | 6 | | Α : | 19930 | 702 |
| | | | | | | | | | | GB | 1993- | 1448 | 6 | | Α : | 19930 | 712 |
| | | | | | | | | | | WO | 1993- | GB25 | 35 | | W : | 19931 | 210 |
| OTHER SO | DURCE | (S): | | | MARE | AT | 121: | 2052 | 17 | | | | | | | | |

AB The title compds. [I, Rl, R2 = (un)substituted C1-6 alkyl, alkenyl, alkynyl, halogn, CN, NO2, CF3, etc.; R3 = H, (un)substituted alkylcarbonyl, (un)substituted CO2H, (un)substituted CONHZ, etc.; R5-R8 = H, C1-6 alkyl; X = NR4, SO, SO2; R4 = H, alkyl, CHO, Bz, alkylcarbonyl; m = 2-4; n = 0-2 when m = 2-3 and n = 0-1 when m = 4], useful as tachykinin receptor antagonists (no data), are prepared Thus, 4-(2- methoxybenzylaminomethyl)-4-phenylpiperidine dihydrochloride, m.p. 78-80°, was prepared from 4-cyano-4-phenylpiperidine hydrochloride in 4 steps.

L5 ANSWER 58 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1990:611853 CAPLUS Full-text

DOCUMENT NUMBER: 113:211853

ORIGINAL REFERENCE NO.: 113:35795a,35798a
TITLE: Preparation of 1-

I

TITLE: Preparation of 1-(2-hydroxyalkyl)piperidines and analogs as antitumor agents

INVENTOR(S): Caravatti, Giorgio; Stanek, Jaroslav; Frei, Joerg

PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz. SOURCE: Eur. Pat. Appl., 17 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|----------|-----------------|----------|
| | | | | |
| EP 374095 | A2 | 19900620 | EP 1989-810919 | 19891205 |
| EP 374095 | A3 | 19911030 | | |

| R: AT, BE, CH, | DE, ES | , FR, GB, GF | R, IT, LI, LU, NL, SE | | |
|------------------------|--------|--------------|-----------------------|---|----------|
| ZA 8909436 | A | 19900829 | ZA 1989-9436 | | 19891201 |
| CA 2004986 | A1 | 19900612 | CA 1989-2004986 | | 19891208 |
| AU 8946076 | A | 19900614 | AU 1989-46076 | | 19891208 |
| DK 8906236 | A | 19900613 | DK 1989-6236 | | 19891211 |
| JP 02212471 | A | 19900823 | JP 1989-319055 | | 19891211 |
| HU 53078 | A2 | 19900928 | HU 1989-6499 | | 19891211 |
| DD 290186 | A5 | 19910523 | DD 1989-335505 | | 19891211 |
| PRIORITY APPLN. INFO.: | | | CH 1988-4574 | Α | 19881212 |
| OTHER SOURCE(S): | MARPAT | 113:211853 | | | |
| | | | | | |

AB The title compds. [I; R1 = C1-30 alkyl; R2 = CO2H, alkoxycarbonyl, CONH2, (un)substituted alkyl, etc.; R3 + H, alkyl, aryl; X, Y = H, OH, alkoxy, acyloxyl were prepared as antitumor agents (no data). Thus, 4-cyano-4-phenylpiperidine was refluxed 6 h with 1,2-epoxydecane in EtOH containing K2CO3 to give the title compound II (R = 1-octyl). A capsulr formulation comprising I is given.

L5 ANSWER 59 0F 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1981:569708 CAPLUS Full-text DOCUMENT NUMBER: 95:165708
ORIGINAL REFERENCE NO: 95:28393a, 28396a
TITLE: Lincompoint a Lincompoint SINVENTOR(S): Birkenmeyer, Robert D. Upjohn Co., USA

SOURCE: U.S., 24 pp. Cont.-in-part of U.S. Ser. No. 96,652, abandoned.

DOCUMENT TYPE: CODEN: USXXAM
LANGUAGE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|----------|-----------------|----------|
| | | | | |
| US 4278789 | A | 19810714 | US 1980-148056 | 19800519 |
| US 4309533 | A | 19820105 | US 1980-194632 | 19801006 |
| US 4310660 | A | 19820112 | US 1980-194634 | 19801006 |
| IL 61245 | A | 19860731 | IL 1980-61245 | 19801010 |
| AU 8063443 | A | 19810528 | AU 1980-63443 | 19801016 |
| AU 535986 | B2 | 19840412 | | |
| CA 1165315 | A1 | 19840410 | CA 1980-362485 | 19801016 |
| GB 2063252 | A | 19810603 | GB 1980-33726 | 19801020 |
| GB 2063252 | В | 19830518 | | |
| ZA 8006438 | A | 19811028 | ZA 1980-6438 | 19801020 |
| NL 8006229 | A | 19810616 | NL 1980-6229 | 19801114 |
| NL 194240 | В | 20010601 | | |
| NL 194240 | C | 20011002 | | |
| DE 3043502 | A1 | 19810604 | DE 1980-3043502 | 19801118 |
| DE 3043502 | C2 | 19890511 | | |

| ES 496988 | A1 | 19820501 | ES | 1980-496988 | | 19801119 |
|------------------------|--------|-----------|-----|--------------|----|----------|
| JP 56087597 | A | 19810716 | | 1980-162723 | | 19801120 |
| JP 63038037 | В | 19880728 | OI | 1500 102725 | | 15001120 |
| BE 886301 | A1 | 19810521 | BE | 1980-202901 | | 19801121 |
| SE 8008181 | A | 19810524 | | 1980-8181 | | 19801121 |
| SE 447260 | В | 19861103 | 0.0 | 1300 0101 | | 15001101 |
| SE 447260 | Č | 19870212 | | | | |
| FR 2470134 | A1 | 19810529 | FR | 1980-24823 | | 19801121 |
| FR 2470134 | B1 | 19850726 | | -500 -1000 | | |
| HU 26810 | A2 | 19830928 | HU | 1980-2786 | | 19801121 |
| HU 187281 | В | 19851228 | | | | |
| HU 30045 | A2 | 19840228 | HU | 1983-317 | | 19801121 |
| HU 190437 | В | 19860929 | | | | |
| CH 647244 | A5 | 19850115 | CH | 1980-8629 | | 19801121 |
| PL 132002 | B1 | 19850131 | PL | 1980-233258 | | 19801124 |
| FR 2487358 | A1 | 19820129 | FR | 1981-13537 | | 19810709 |
| FR 2491072 | A1 | 19820402 | FR | 1981-13542 | | 19810709 |
| FR 2493852 | A1 | 19820514 | FR | 1981-13543 | | 19810709 |
| FR 2493852 | B1 | 19850816 | | | | |
| SU 1169543 | A3 | 19850723 | SU | 1981-3444858 | | 19810819 |
| ES 507346 | A1 | 19820816 | ES | 1981-507346 | | 19811120 |
| ES 507347 | A1 | 19820816 | ES | 1981-507347 | | 19811120 |
| ES 507345 | A1 | 19820901 | ES | 1981-507345 | | 19811120 |
| CA 1164863 | A2 | 19840403 | | 1982-414643 | | 19821101 |
| CA 1164864 | A2 | 19840403 | | 1982-414644 | | 19821101 |
| CA 1165316 | A2 | 19840410 | CA | 1982-414645 | | 19821101 |
| JP 63225392 | A | 19880920 | JP | 1988-26734 | | 19880209 |
| JP 01041157 | В | 19890904 | | | | |
| PRIORITY APPLN. INFO.: | | | | 1979-96652 | | 19791123 |
| | | | | 1980-148056 | | 19800519 |
| | | | CA | 1980-362485 | A3 | 19801016 |
| OTHER SOURCE(S): | MARPAT | 95:169708 | | | | |
| GI | | | | | | |

AB Lincomycin analogs I (R = amino function from Me 1-thiolincosaminide derivs.; Rln = H, (un)substituted C1-8 alkyl, (un)substituted C3-8 cycloalkyl, halo, Ph, substituted Ph, substituted O, substituted N hydroxyalkyl, aminoalkyl), with activities against bacteria, coccidia, and mycoplasma, were prepared

Thus, 4-ethyl-2-pyridinecarboxylic acid-HCl was treated with Et3N and iso-Bu chloroformate and then with Me $7(S)-7-deoxy-7-chloro-1-thio-\alpha-lincosaminide to$ give II, which was hydrogenated over PtO2 in MeOH-HCl to give III. Antimicrobial spectra of III are given in comparison with those of clindamycin.

L5 ANSWER 60 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1969:57609 CAPLUS Full-text

DOCUMENT NUMBER: 70:57609 ORIGINAL REFERENCE NO.: 70:10809a,10812a

TITLE . New antibiotics

INVENTOR(S): Maggi, Nicola; Sensi, Piero PATENT ASSIGNEE(S): Lepetit S. p. A.; CIBA Ltd.

SOURCE: S. African, 17 pp. CODEN: SFXXAB

DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

| PAT | TENT NO. | KIND | DATE | APPLICATION NO. | | DATE |
|------|---------------|------|----------|-----------------|---|----------|
| ZA | 6706475 | A | 19681229 | ZA 1967-6475 | | 19671115 |
| GB | 1159267 | A | 19690723 | GB 1966-49389 | | 19661103 |
| IL | 28777 | A | 19711229 | IL 1967-28777 | | 19671016 |
| NL | 6714242 | A | 19680506 | NL 1967-14242 | | 19671019 |
| DK | 114697 | В | 19690728 | DK 1967-5280 | | 19671023 |
| FI | 45978 | В | 19720731 | FI 1967-2856 | | 19671024 |
| CH | 483444 | A | 19691231 | CH 1967-15186 | | 19671030 |
| CH | 491954 | A | 19700615 | CH 1969-12547 | | 19671030 |
| CH | 496730 | A | 19700930 | CH 1970-6917 | | 19671030 |
| US | 4188321 | A | 19800212 | US 1967-679195 | | 19671030 |
| NO | 117855 | В | 19691006 | NO 1967-170360 | | 19671101 |
| SE | 330173 | В | 19701109 | SE 1967-15059 | | 19671102 |
| BE | 706022 | A | 19680318 | BE 1967-706022 | | 19671103 |
| ES | 346731 | A1 | 19690101 | ES 1967-346731 | | 19671103 |
| FR | 1601071 | A | 19700810 | FR 1967-126965 | | 19671103 |
| CS | 150943 | B2 | 19730917 | CS 1967-7802 | | 19671103 |
| JP | 50024960 | В | 19750820 | JP 1967-70908 | | 19671104 |
| FR | 7156 | M | 19690804 | FR 1968-138464 | | 19680202 |
| FI | 47666 | В | 19731031 | FI 1972-782 | | 19720322 |
| FI | 48473 | В | 19740701 | FI 1973-2093 | | 19730629 |
| RITY | APPLN. INFO.: | | | GB 1966-49389 | A | 19661103 |

OTHER SOURCE(S): MARPAT 70:57609

AB Rifamycins B, O, S, SV, and their 25-deacetyl derivs. are prepared by alkaline hydrolysis in a solvent and (optionally) convertion of the derivs. of rifamycin S and SV into each other by using ascorbic acid or K3Fe(CN)6 or hydrogenation of the aliphatic chain of the rifamycin mol. to the corresponding hexahydro derivative E.g., to prepare 25-deacety1-3diethylaminomethylrifamycin SV, to a solution of 7.8 g. diethylaminomethylrifamycin SV dissolved in 160 ml. ethanol, was added an aqueous 5% NaHCO3 solution, 50 ml. of the mixture was refluxed 8 hrs., cooled, and concentrated in vacuo; 70 ml. water was added and the mixture extracted with 200 ml. AcOEt after adjusting the pH to 4-4.5. The organic layer was dried and concentrated in vacuo to yield the deacetyl derivative, which was filtered off and purified by chromatog, on silica gel with Me2CO-CHC13 (1:3) as eluent to yield 5 g. product decomposing 152-8°. Similarly prepared were 25-deacetyl-4-guanylazo-4-deoxyrifamycin SV, decomposing 228° and 25deacetylrifamycin S (I), decomposing 144-7°. I is completely hydrogenated in

EtOH with PtO2 catalyst by taking up 4 moles H. The mixture is filtered, the filtrate evaporated, the residue dissolved in NaHCO3 solution, the solution oxidized with K3FeCN6 and the product extracted with CHCl3 to give 25-deacetylhexahydrorifamycin S, m. 122-30° and SV, no m.p. given. Also prepared were (m.p. given): 25-deacetyl-3-methylaminorifamycin S, 208°, and SV, -; 25-deacetyl-3-morpholinorifamycin SV, 240°, and S 175-8°; 25-deacetyl-3-dimethylhydrazonomethylrifamycin SV, 179-81°, and 25-deacetyl-3-piperidinorifamycin SV, 242-5° to 30°.

=> log off

ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF LOGOFF? (Y)/N/HOLD: $_{
m Y}$

STN INTERNATIONAL LOGOFF AT 07:58:44 ON 10 JUL 2008